

DUSTON IRON ORE COMPANY, AND ITS MANAGEMENT.

TO THE EDITOR OF THE MINING JOURNAL, AND THE SHAREHOLDERS OF THE DUSTON IRON ORE COMPANY.

GENTLEMEN.—I observed in your Journal of the 8th inst. a statement of the proceedings of the Duston Iron Ore Company, at an extraordinary general meeting of shareholders, held on the 7th inst., together with the report of the committee appointed to investigate and report on the state and prospects of the company's works at Duston, and read by the Chairman (Mr. Hingwood) to the meeting.

In that report I notice certain allegations, or charges, seriously affecting my character as managing director, which if uncontradicted would materially affect my prospects in life; and as I am altogether quite unconscious of deserving the calumnies so unparaphrasedly heaped upon me, I cannot allow them to pass unnoticed, especially as I was refused admittance to the meeting by the Chairman, when I ought at least in justice to have been allowed to be present, so as to give me an opportunity of hearing and rebutting the charges, if I could, and of setting myself right with the shareholders. I have, therefore, resolved, through the medium of the press, to offer some explanation to the public and the shareholders generally in defence of my character, by laying before them a truthful statement of all the facts, satisfied I shall obtain at their hands justice, and an impartial hearing, which has been so cruelly denied me by the board and their partisans.

I shall now notice the charges in the order in which they severally appear. It is first asserted by the committee that "they found great and inexcusable mismanagement had for a long period taken place, and that they decided that the works should be stopped, excepting a few trifling things which the managing director stated would not cost more than 5*l*."

As to mismanagement, I deny they can prove any such charge against me; and if they could, the directors must share the blame, for they were informed each board-day while I was residing in London, and by my monthly reports in May and June last, all that was going on, and all was approved of up to the 4th July last, when I made known to them my circumstances, which rendered me unable to meet my call of 2*l* 6*d*. per share then due, occasioned by a quick succession of reverses in our trade, which it was impossible to avoid; and from that time there has been an evident determination to crush me,—there being no allowance made for the fact that I have paid towards the company's funds 1500*l*. on my shares, being a sum nearly four times larger than any other shareholder has paid.

With regard to the assertion "that a few trifling matters could be done for 5*l*," I positively deny ever having been consulted thereon, or making such a statement. As to "the kilns having been most extravagantly, expensively, and improperly built, and not fit for the purpose for which they were intended, and their having been built under my superintendence," in answer, I beg to state that when the bed of the river was discovered I did not take upon myself the responsibility of declaring it to be of first-rate quality (which it has since proved to be, and which I imagined it to be), but recommended the board to employ a qualified person to report thereon, at the same time mentioning Mr. Clayton, who, with Mr. Beevor, one of the directors, visited the works on the 10th August, 1854; and the report being favourable, it was decided that plans and specifications for working it by steam power, on Mr. Clayton's principle, should be forwarded. These were placed before the directors on the 5th and adopted on the 7th September, 1854, in accordance with the entry now standing in the company's minute book; and the said plans were placed in the hands of Mr. Nicholls, to carry out, and never were in my possession during the progress of the building, till the 6th July last, when, noting an important error committed in the dome of one of the kilns, I took possession of the plan relative thereto, and the kilns were carried out, with the exception of a few errors committed by Nicholls, strictly in accordance with the plans adopted by the board of directors, and I had scarcely anything to do with them, inasmuch as they had progressed considerably previous to my residing in the neighbourhood; and instead of being useless, they are strictly calculated for what they were intended—namely, the burning of bricks and tiles on the most economical principle for the consumption of fuel, which I am prepared to prove, from practical experience, is the case, notwithstanding the bold assertion made by Mr. Halsey, that he could burn with less fuel in the ordinary kiln, or even in clamps.

The next accusation is, "the shed not having been finished, and the rain having come in at various parts, particularly from the roof, which has caused, and is causing, great and serious damage to immense quantities of bricks unburnt, and which rendered such unburnt bricks useless, and entirely lost to the company."

I beg to state there was no other place besides the roof at which the rain could come in, the sides being built of brick, with boarded openings at intervals; and as for the loss sustained throughout, I am prepared to prove it has not exceeded, at the utmost, more than from 5*l*. to 10*l*. I beg further to state, that at the time the roof was ready to be covered there was no quantity of tiles to be had at or near Northampton, or otherwise I should not have temporarily covered it with boards, which have been made available subsequently, as they became at liberty, for the covering of the bricks in the open air; and had I bought tiles instead of making, the difference to the company would have been from 55*l*. to 60*l*. I, therefore, preferred making them, and hazarding the loss that might possibly be sustained from the weather.

I now proceed to the next clause, and find "We are also informed, on good authority, that many parts of the various buildings have been erected, pulled down, and re-erected, at a very great cost, under the direction of Mr. Lucas, who, we are also informed, perished in his course, although frequently warned by others, and particularly by Mr. Nicholls, that he was pursuing an entirely wrong course, to all of which he had paid no attention."

Now, I solemnly declare that not one single brick has been, to my knowledge, laid, pulled down, and relaid, by my orders; and the only portion of the masonry that I have heard of being rebuilt is part of the gable end of the machine-house, which was forced out through carelessness, under Nicholls's superintendence, whilst a beam of timber was being put in its position, but which was rebuilt with unusual rapidity, previous to my next visit, in order that I should know nothing about it. I deny altogether that either Nicholls or any other person has in any one instance "warned me against the path I was pursuing;" nor was there any reason to do so, but, on the contrary, all parties appeared satisfied with my management, and dissatisfied with Nicholls, until the reverse in my circumstances became known.

I next come to the chimney question, where I find the following words used—"Upon the occasion of the erection of the chimney of the shed, which is very high and heavy, Mr. Nicholls was giving directions as to the depth of the foundation, when Mr. Lucas interfered, and insisted that the foundation should not be so deep, and that there was no necessity for its being so deep, and that he would not permit it to be of the depth ordered by Mr. Nicholls; that Mr. Lucas's instructions being very imperative, the foundation was made according to his instructions, the consequence of which was, that after the chimney had been erected on such foundation, it was giving way, and was obliged to be reconstructed, at an additional labour and cost to the company; that Mr. Nicholls was a builder by trade, and had been so, more or less, all his life."

In reply, I can only class this with the last-mentioned charge, as to the magnitude of its falsehood. The facts are simply these. During one of my visits to the works, I decided on the site for the foundation; and until my next visit, in about a week or ten days, when the chimney was erected to about 3*ft*. high, I knew nothing as to the depth of its foundation (although it was discussed at the time of the site being decided on); but on my return, on the 10th August, I was informed, in the following words by Nicholls—"We were obliged to go much deeper than we talked about, as I found it would not be safe," upon which I expressed myself satisfied;—thus you will perceive the foundation was laid when I was in London, and could not by any possible means have given the instructions with which I am charged. But I may here state, that the depth of the foundation had nothing to do with the chimney getting out of its perpendicular: the sole cause was Nicholls having put up a leaden gutter between the machine-house and shed, and within a few feet of the chimney, without putting a waste-pipe to carry off the water, which, from the heavy rain on Sunday, the 10th May, ran down the chimney, and under the feet of the chimney, and the chimney, which was not "reconstructed," as the Chairman has reported, but was merely underpinned, at a cost of about 50*l*. As to Nicholls palming himself off as a builder, never heard of previously, I believe; and the nearest approach thereto is, as I am informed, he was engaged in early life as stonemason in the erection of some church or churches; but he is only known in this neighbourhood as a concealed small publican, having, until quite recently, kept the Cross Keys public-house, Sheep-street, Northampton.

We now come to Clayton's machinery, concerning which the report states "it was contracted for by Mr. Lucas, and we were informed it could not be worked with utility, that it had been repaired on several occasions, to such an extent that, in point of fact, it ought to be called by some other name than that of Clayton's machine, as not much, if any, of that machine by that time was left, and that the fact is it was worthless."

This appears more a subject for Mr. Clayton to answer than myself. However, as I am charged with contracting for it, I refer the reader to my answer above relative to the kilns, where I have clearly proved myself to be the contractor, on Sept. 7, 1854, and now stand to that contract. The machinery was not contracted for by me, but by Mr. Clayton, and I reported to the board on May 23 and June 25 last; and subsequently I saw reason to attribute the failure more to the way in which the clay had been raised than to any material defect in the machinery. It may be asked whose duty it was to look after the raising of the clay? I answer, it was Nicholls's duty (being myself then a resident in town); and I assert it without fear of contradiction, that had he attended to repeated urgent requests from me, the brick contractor, and others, to keep stones and rubbish from being brought in, the result would have been far different. As to the machinery being so much repaired that it can scarcely be called Clayton's machine, it is simply absurd. I acknowledge that at the onset a serious fracture took place in the giving way of one of the knives in the pugging mill, damaging it, as I then considered, to the extent of 15*l*., but which was subsequently repaired by Mr. Clayton, free of charge. The main shaft of said mill has once since been strained, and three or four small plates have been put on the tile machine, which was broken, I believe, through the want of proper attention to the cleaning of the screen. These, with a little alteration in the mode of cutting the bricks, constitute, I believe, nearly, if not all, the transformation the machinery has undergone. So much for the charge of "its being so altered as to be no longer properly called Clayton's machine." With respect to its worthlessness, I will undertake at any time to make bricks and tiles at a cost that cannot be made by hand, leaving the company a profit of 12½ per cent., after paying the royalty of 2*s*. per 1000, and be enabled to sell them as low as 20*s*. per 1000, and if any bricks or tiles are not marketable, I will take them all on my own responsibility. And as to the assertion made about their paying 30 per cent. if made by hand, and selling them at 20*s*. (which competition will compel them to do), it is so absurd that it is not worth noticing, further than it shows most fully the committee's utter ignorance of the subject in question.

I now come to the ore, where I find myself charged with "sending away that of an inferior quality not worth removing, while the ore sent away by the committee was from a totally distinct mine, and of superior quality; that the pig-iron produced from smelting the latter was of a very excellent quality, a portion of which was exhibited in the room for inspection." Now, if we refer to the letter of Mr. T. C. Hinde, bearing date the 3d inst., in the committee's report we find this observation:—"The time has not been sufficient to allow us to use any but the stone already calcined." It so happened that this said calcined stone, which is reported as having made such good pig-iron, was taken from the very raw stone now condemned, and is the very stone the Chairman, directors, and shareholders saw in bulk, and so loudly praised, at the opening of the works, in January last. Moreover, it is stated that the ore now sent by the committee is from a totally distinct mine. Now, this is not strictly correct, as it is virtually the same mine, though obtained about 100 yards distant from the site where the ore that was calcined was taken from, and it would have been impossible to have opened the works on any other site, even if the ore had proved "worthless," as the Chairman's own words, and by it bearing the same analysis as the ore which is now condemned, and the value of the ore, and the work of the reader. The ore is also stated to have been "badly and irregularly calcined." In reply to this accusation, I took the precaution of requesting Mr. Bond, of the firm of Messrs. Bond and Matthews, Corby's Hall, near Dudley (a firm who have had considerable quantities of ore from the company's estate), to send me a person well acquainted with the calcining of Northamptonshire ores, when Mr. Bond accordingly

sent a man highly recommended from their works, and by whom the ore in question was calcined. It is, therefore, clear I took the best means of having the ore properly calcined, and that it was well done; and I am supported in this observation by the very fact that the said firm have used some of this calcined ore without complaint, which is not likely they would have done had they considered it "badly and irregularly calcined."

I notice in Mr. Hinde's letter of the 3d inst., that they are enabled to use one-third of the ironstone without detriment to the working of the furnace. Surely this must be an error. Surely the committee cannot have been so stupid as to have entered into a contract to give away and pay the carriage nearly 100 miles of 400 tons of the company's ore, to smelt them with ore of a more refractory character, when it is so well known this is the very evil to be guarded against, and that such a mixture never can or will answer. Surely they are not wasting the company's funds to accomplish this, or to obtain that information which any ironmaster in Derbyshire, Staffordshire, or South Wales, who have used the Northamptonshire ore, would have readily afforded them on application. Surely they are not doing this, in opposition to the terms of the lease, which binds them to pay 9*d*. per ton on all ore imported on the company's works, thus amounting almost to a prohibition of the carrying out on their own works the process now adopted by Messrs. Hinde and Co. Surely this cannot be the case, particularly after I have so repeatedly told them the only method of working the Northamptonshire ore is by itself, in suitably constructed furnaces, and that happily no other ore need be mixed with it, which is the conviction not only of myself, but of all practical men conversant with these ores.

If, however, I am mistaken, if the committee have perpetrated these abominations, I deeply regret the shareholders have so misplaced their confidence, as they will ultimately find to their own cost, as it was stated at the outset, before sending the ore into Shropshire, that not more than 50*l*. or 60*l*. expense would be incurred, which on the 7th August augmented to 100*l*., and I am now prepared to prove has already cost the company more than 250*l*. since the 4th of July, independent of more than a similar amount indirectly, and other losses and injury sustained by the company through the mismanagement of this committee of investigation. Such is my statement, in answer to the foul calumnies brought against me, and which I have felt it my duty to make in vindication of my character, and trust the explanations given are sufficient to satisfy you that the charges brought against me in the report are without foundation, and totally untrue.

What I have stated are undeniable facts, which I am ready to prove at any moment before the shareholders, or any competent tribunal, and I challenge my accusers, the Messrs. Bisgood, Woolley, Beevor, and Thomson, and do hereby call upon them, if they have any regard for their honour, their integrity, or position in society, to substantiate the charges which they have so cruelly and unparaphrasedly brought against me before the public. Will, therefore, you shareholders remain in silence, and be so blind to your own interest, as to suffer these facts now brought before you to pass unnoticed? Will you allow your property to be thus wasted, without any possible benefit likely to result? Will you, as lovers of truth and justice, allow one who has honestly and faithfully discharged his duties to you to be crushed by the tyrannising hand of malice and oppression? If not, I entreat you to be up and stirring, attend punctually the meetings, suffer the truth to be told, however disagreeable it may be to the Chairman and the board of directors, then judge and act for yourselves. DUSTON, SEPT. 17. THOMAS LUCAS.

THE TRENALT TONTINE.

£10,000, in 200 subscriptions of £50 each, On Lives of not less than Seventy Years of Age, on the 1st January, 1855. The return of each subscription secured on the death of the nominee.

TRUSTEES.
SIDNEY BEISLY, Esq., 17, Hyde-park-gate South, Kensington Gore.
FRANK WHITTAKER BUSH, Esq., 9, Old-square, Lincoln's Inn.
JAMES E. SAUNDERS, Esq., 7, Lower Thames-street.
BANKERS—London and Westminster Bank.
SOLICITORS—Messrs. Beisly and Pattison, 1, Lincoln's Inn-fields.
LOCAL AGENTS—Messrs. Pattison, White, and Dingley, solicitors, Launceston.
SECRETARY—Perry F. Nourse, Esq.

OFFICES,—17, BARGE YARD CHAMBERS, BUCKLESBURY.
(Late the offices of the Devon Great Consols.)

ABSTRACT OF PROSPECTUS.
A Tontine is comprised of small investments for life annuities, with immense benefit of survivorship; and the Tontine Tontine possesses the unique and important feature of providing for the return of the amount of each subscription on the lapse of the life of the nominee.

The estate of this tontine is situated in the parish of Treven, in the county of Cornwall, and consists of 100 acres of freehold land, embracing the entire village or hamlet of Trenal.

It is proposed to raise the capital in 200 nominations of £50 each, and that the estate shall be held for the benefit of the subscribers as personal estate. Half-shares of £25 each will, however, be received where the two parties subscribing £25 each mutually agree on one life.

On payment of each subscription, a policy of insurance on the life of the nominee will be given to the subscriber. Each subscription of £50 each, or two of £25 each, must be held upon one life of either sex, of not less than 70 years of age, to be nominated by the subscriber; and upon the fall of any life, the share in the ultimate stake depending thereon will merge for the benefit of the owners of the continuing shares. As soon as the lives shall be reduced to one, the entire estate, and all its benefits, will pass into the possession of the survivor of this life, and become his fee-simple; but as the property is capable of being divided into three compact farms, with residence on each, it may be desirable to divide the tontine when the survivor is reduced to three.

From the data given in the detailed prospectus, it is evident that the revenue from the property will become very considerable; and it is therefore proposed, from the proceeds thereof, that interest, at the rate of 5 per cent. per annum, shall be paid half-yearly on each subscription, during the life of the nominee; and that, after providing for the continuing policies, and as the income accumulates, bonuses shall be appropriated from time to time to the continuing survivors. In this way, a subscriber of £50 may receive back his money in a short time, and yet continue to receive his interest of £50, to hold a policy of insurance for £50, as well as to have his chance of the entire estate.

In case the number of nominations is not subscribed, the money will be returned. Applications for shares to be made to the secretary, solicitors of the company, or local agents, from whom plans of the estate, with prospectus, may be obtained.

THIRD EDITION.
This day is published, in crown octavo, boards, with Tables, 240 pp. Price 3*s*. 6*d*. by post 4*s*.

BRITISH MINES CONSIDERED AS A MEANS OF INVESTMENT.
WITH PARTICULARS OF THE PRINCIPAL DIVIDED AND PROGRESSIVE MINES IN ENGLAND AND WALES.
THIRD EDITION, WITH AN APPENDIX, GIVING INFORMATION UP TO THE LATEST PERIOD.

By J. H. MURCHISON, Esq., F.G.S., F.R.S., &c.
London: Mann, Newbery, 39, Cornhill. Copies may also be obtained at Mr. Murchison's office, 117, Bishopsgate-street Within; and at the Mining Journal office, 26, Fleet-street, London.

A very useful publication, and calculated to considerably improve the position of home mine investments.—Mining Journal, Dec. 2.
This is a valuable guide to investors in mines.—Herald's Journal, Dec. 2.
Mr. Murchison takes sound views upon the important subject of his book, and has placed, for a small sum, within the reach of all persons contemplating making investments in mining shares that information which should prevent rash speculation and unproductive outlay of capital in mines.—Morning Herald, City Article, March 21, 1855.

The book comprises a great deal of very useful information, of special interest to persons having capital employed, or who may be desirous of investing in mines.—Morning Chronicle, City Article, March 28, 1855.
Mr. Murchison has here brought together the details most wanted on the legitimate mining undertakings at home.—Globe, City Article, Dec. 7.

The book will be found extremely valuable as a guide to all who are interested, or about to seek investments in mines; and we have elsewhere availed ourselves of some of the mining curiosities which Mr. Murchison has so skillfully brought together.—Observer, Dec. 24, 1854.

Will be exceedingly valuable to any one who desires to adventure in this important branch of our home industry, and comprising all that is necessary to guide a person in a judicious outlay of his capital.—Plymouth Journal, Dec. 7.

The matter appears to us to be treated with much ability, and those who have any interest in mining, or who are desirous of investing capital in mines, should avail themselves of the information which the writer has so clearly brought together.—Plymouth Herald.

The author of this little work has evidently devoted considerable attention to the subject on which it treats, and has succeeded in producing a volume replete with information valuable to those interested in mining speculations.—Bristol Mirror.

Those who are seeking information on mines and mining operations, with regard to money investment, will find all the instruction and guidance they need in these pages.—Dover Chronicle.

This is a very valuable book, which all who are interested in mining ought to possess. It is calculated, we think, to give an impulse to legitimate mining adventures, and to prudent enterprise.—Cornwall Gazette.

A very valuable work to those engaged in mining matters; it contains a great amount of important information, not to be had, in an equally clear, condensed, and comprehensive form, in any other publication.—Morning Advertiser, City Article.

The work is indispensable to those persons who have any interest in mining.—Derbyshire Courier.

This is a clear, succinct, statistical, historical, and geological description of the leading mines in Great Britain, with an especial view to their eligibility as investments. The author has taken particular care to discriminate between those mines which are sound and legitimate, and those which are simply speculative in their character. He has treated the subject with great ability.—Blackburn Standard.

It is a complete directory of mining enterprises, and ought to be read with scrupulous care by those who have any money for investment.—Nottingham Journal.

To capitalists and those interested in this kind of property, the work will prove very serviceable.—Birmingham Mercury.

Mr. Murchison has treated the subject with great ability, and investors will find it a valuable guide.—Walsingham.

Mr. Murchison has produced a most admirable compendium—both of progressive mines and dividend mines—full of information, and likely to be most useful to those actually engaged in these speculations.—Bristol Mirror.

A little manual of a practical character, by one who has had great experience in the management of British mines, calculated to be of value to speculators.—Bath Journal.

The book is cheap, and we have no hesitation in saying that it will be found highly useful to all connected with mining operations.—Ulverston Advertiser.

In the Mining Journal of 7th July, these reviews will be seen at greater length, with others from the Dorset County Chronicle, Glasgow Examiner, N. Wales Chronicle, Edinburgh Guardian, Derby Advertiser, Belfast News Letter, Exeter Gazette.

Just published, in One Volume, demy 8vo., 110 pages, illustrated by Twenty-two Maps, Diagrams, &c.

FOUR LECTURES ON GEOLOGY AND MINING.
Read at Leeds, Hull, Bradford, Harrogate, &c. By GEO. HENWOOD, M.E. Forming a complete compendium of these subjects. Dedicated, by permission, to Sir CHARLES LEECH, Bart., F.R.S., F.G.S., President of the Royal Cornwall Polytechnic Society, &c.

Published (for the author) at the Mining Journal office, 26, Fleet-street, London. Price, handsomely bound in cloth lettered, 2*s*. 6*d*.; by post, 3*s*.

[PRELIMINARY ANNOUNCEMENT.] GREAT WHEAL BUSY UNITED MINING COMPANY (LIMITED), KENWYN, CORNWALL.

In 6000 shares of £10 each, with power to increase. Deposit 50*s*. per share, and the remainder by calls of 25*s*. per share, at intervals of not less than six months.

To be worked under the "LIMITED LIABILITY ACT." SOLICITORS—Messrs. Wire and Child, 9, St. Swithun's-lane, City. ENGINEERS—Sims and Sons, Redruth.

OFFICES,—17, OLD BROAD STREET, LONDON.

PROSPECTUS OF GREAT WHEAL BUSY UNITED MINES, Embracing Wheal Busy, Wheal Daniel, South Hellenbeagle, Old Hellenbeagle, North or New Hellenbeagle Mines, and an area of ground one and a half mile long by one mile wide, situated in Kenwyn, Cornwall (dues, 1-24th; term 21 years), and abutting on Wheal Union, Poldice, the Great Consols, and the United Mines on the north, and Treaskerby and North Downs on the west.

These mines contain upwards of 20 copper and tin lodes, and have paid immense profits to the adventurers. There is an adit brought into the sett from 40 to 50 fms. deep from surface, and there are engine and other shafts sunk to a depth in Wheal Busy of 100 fms. below the adit, at Old and New Hellenbeagle to the 60 and 70 fms. level, and in Wheal Daniel to about the 40 fms. level. The lodes are also driven on in the 10, 20, 30, 40, 50, and 60 fms. levels in the Hellenbeagle Mines, and in Wheal Busy the levels are extended to the 100 fms. level below the adit. These mines possess rich copper and tin lodes when the operations ceased, for particulars of which see the reports of the several mine agents.

Gentlemen conversant with mining matters will see that these mines, comparatively speaking, are in their infancy. Some thousands of pounds sterling have been expended in introductory works, in bringing in the adits, sinking shafts, and driving levels on the lodes, as stated above, through strata of mineral ground not surpassed in any mines in the world. It only remains to draw out the water, which can be effected in 12 months, that the rich courses of copper and tin ores, left when last these mines were wrought, may at once be raised to the surface, and immediate and handsome returns will be made.

It is the united opinion of persons competent to speak on these mines, that when they shall have been set to work, the immense profits that will accrue therefrom will place them in a position second to none in the county of Cornwall, or elsewhere.

In the report of the late engineer of the above mines, he states that the water drawn from Wheal Busy, on an average for 12 months, was 478 gallons per minute; and that an 85-inch engine will be ample not only to drain the mine, but will be sufficient to prosecute it to a much greater depth; and that two 70-inch engines, one in the old and the other in the new Hellenbeagle, will be sufficient for every purpose.

It is thought that much less than £50,000 will be ample to put up all proper machinery, drain the mines to the bottom, and render them dividend-paying; and that when so done, they will pay 30 per cent. on the capital invested. It may be considered, therefore, that there is no speculation in the concern, but a pure investment of capital; for it will be seen, from the several reports given by the mine agents, that there is upwards of £300,000 worth of copper and tin ores already discovered in the mines, to take away.

The operations in Wheal Busy commenced in 1810, and ceased in 1828, during which time the lode received as dues, at a 20th dish, £17,192 19*s*. 6*d*., notwithstanding the very inefficient way in which the operations were carried on, and the low standard of copper and tin, being more than 20 per cent. less than the present price.

There were raised and sold from Wheal Busy alone, last 14 months the engine was at work 5311 tons of copper ore, which realised £21,170 5*s*. 2*d*. The returns of tin ore was at £40 per ton of tin to every 20 tons of copper ore; making the returns of tin 265 tons, at £40 per ton, realising £10,600. And the first 12 months the engine ceased working there were sold from Wheal Busy alone 248 tons of copper ore, which realised £10,731 4*s*. 6*d*.; making the returns of tin 142 tons, at £40 per ton, £5680. This does not show want of ore.

The West Cornwall Railway runs through the sett from east to west. The mines are within four miles of Port Treath and six miles of Devon, and connected with both sea ports by a tram-road, which runs through the sett.

The inducement to work these shallow mines is the improvement in machinery of all descriptions, the high standard of copper and tin, and last, though not the least, the great economy and science displayed in all mining operations in the present day over the time when these mines last worked.

In the last working of Wheal Busy the adventurers paid 36*s*. per 100 kibbles to raise the stuff to surface; the engineer above referred to states the same quantity of stuff he would now engage to raise to the surface for 2*s*. 6*d*. They also paid 1*s*. per 100 kibbles for filling and landing, and 10*s*. per ton for dressing. The expense was great that thousands of tons of copper and tin ores are now broken and lying underground in the excavation in the mine, which can be raised to the surface and made marketable for less than one-half the present worth.

Capt. Johns says—"There are hundreds of thousands of tons of copper and tin ores on Wheal Busy already broken, nothing to do but send up and dress; and that there are immense quantities of copper and tin ores already discovered, and now standing in sight on the mine to take away; and when the mines are put in good course of working, they will be second to no mine in Cornwall."

Capt. Skewes, of New Hellenbeagle, says—"There are two courses of copper ores in the back and bottom of the 60 fathom level, east of shaft 20 fms. long, which will let at 2*s*. 6*d*. and 6*s*. in £1, and that there is a course of copper ore in the bottom of the 60 fms. level, west of shaft on the same lode 50 fms. long, which will produce 4 tons per fm., worth 11½ per cent., and will let at 1*s*. in £1, when dry. Capt. Paul Bay, of the Wheal Seton, says the same; they had 55 pitches working when the mine stopped, at tributes from 2*s*. 6*d*. to 1*s*. 4*d*."

Capt. Stephen Lean, of Wheal Seton, examined New Hellenbeagle several times; he says—"There is a course of copper ore in the bottom of the 60 fms. level 45 fms. long, producing 4 tons per fathom, worth full £12 per ton; and there are two other courses of copper ore east of the same shaft, in the 60 fms. level, each 20 fms. long, and will let at 3*s*. in £1."

Mr. Rosewall says—"There is a course of copper ores in South Hellenbeagle, on Reid's lode, in the 40 fms. level, 10 fms. long, worth £30 per fm.; and in the 30 fms. level, on the same lode, there is a course of ores for 60 fms. long, producing 1½ ton per fm.; and there is a course of copper ores in the bottom of the 30, on Oat's lode, for 60 fms. long, will produce 1½ ton per fm., worth £11 per ton, or £16 per fm.; the ground can be worked for 60*s*. per fm.; and the lodes in the Old Hellenbeagle under the south, and the lodes in South Hellenbeagle north; they will join in the 110, where the ore will be immense."

Mr. James Nichol says—"There is enough copper and tinstuff broken in Wheal Busy to pay for the erection of all proper machinery; and there is a course of ores in the 90:12 men can raise 100 tons per month."

Mr. Richard Nichol says—"He worked in Wheal Busy when the mine stopped working; that the ore was abundant throughout the mine, and in the 60, in the western part of the mine, a rich lode was cut in the side; six men raised 100 tons of ore, which realised 25 per ton, at 105 standard; and that the same lode was cut in the 60, east of Cloyneweth's shaft, where the ore were of an extraordinary size and quality; that Ralph Blight, &c., worked on it until the water rose up and drove them."

Capt. William Martin, Stithians, the greatest mining authority in Cornwall says—"He examined the above mine in 1827 several times, and he examined Wheal Busy three weeks before she ceased working. There is enough copper and tin stuff broken in Wheal Busy to pay the expenses of the mine for years; and that there are several courses of copper ore worth from £20 to £240 per fm.; and that there is a course of copper ores in Old Hellenbeagle Mine, in the 60, 50 fms. long, worth £22 per fm. The ore is so immense in these mines that they will pay at least £24,000 per annum profits, and that for 20 years."

The object of the company is to effectually work these mines. More than one-half of the shares are already taken, and the remaining shares will be placed into good hands. Applications for the same may be made either in London or to the managers, Mr. J. B. PASCOE, of Camborne, Cornwall.

FORM OF APPLICATION FOR SHARES.
To the Directors of Great Wheal Busy United Mining Company (Limited), and in consideration thereof, I herewith send the deposit or first call, as named in the prospectus, and will sign the Deed of Settlement when called upon so to do.

Name in full.....
Residence.....
Place of business.....
Name of referee.....
Profession.....

IMPORTANT TO ALL WHO SING.
From S. PEARSON, Esq., Vicar Choral of Lichfield Cathedral.—"A lady of distinction having pointed out to me the qualities of Dr. LOCOCK'S PULMONIC WAFERS, I was induced to make trial of a box, and from this trial I am happy to give my testimonial in their favour. I find by allowing a few of the wafers—taken in the course of the day—to gradually dissolve in the mouth, my voice becomes bright and clear, and the tone full and distinct. They are decidedly the most efficacious of any I have ever used."

Dr. LOCOCK'S Wafers give instant relief and a rapid cure of Asthma, Coughs, and all Disorders of the Breath and Lungs. Price 1*s*. 1½*d*., 2*s*. 9*d*., and 11*s*. per box. Sold by all druggists. Beware of counterfeits.

THE MOST PRECIOUS DISCOVERY OF THE AGE!
NO MORE RHEUMATISM!—THE PAUSILLIPIC LOTION.
FOR THE SPEEDY CURE OF acute Rheumatism, the most distressing Rheumatic Headache, Lumbago, Sciatica, Swollen Glands, Cramps, Rheumatic Pains in almost every part of the body, and many other complaints, by a few outward and painless applications to the part affected. A couple of days, in most cases, will suffice to completely cure the sufferer.

The number of testimonials in the hands of the proprietors, as to the almost miraculous effect of this wonderful remedy, is incredible. The following are a few of those recently received:—

July 30, 1855.—GENTLEMEN: I have used the Pausillipic Lotion as a means of relief for rheumatism in the shoulder, and sciatica in the hip; my suffering, especially from rheumatism, was extremely acute, and I found myself completely relieved by applying the lotion morning and evening for three successive days. I had to take no internal medicine, or to observe any particular regimen, neither was it due to you, and during the time to abandon my ordinary avocation. I consider it the publication of feel induced in the interest of suffering humanity, to authorise the publication of these lines.

Original Correspondence.

THE STEAM-ENGINE—ITS IMPROVEMENT RETARDED BY PROFESSIONAL JEALOUSY.

Sir,—The recriminations indulged in between the exclusively abstract and the exclusively practical, which are continually coming under notice, are simply the result of such exclusive and partial acquaintance of the subject, upon which each condemns the other. As those who combine practical experience with abstract knowledge must appreciate the great assistance which the one branch imparts to the other, and cannot be unconscious of the difficulty they have to define exactly where the one begins and the other ends, unless the practical man be defined to be one who copies exactly what he has seen made and worked before. Whenever a man goes beyond this, he must to some extent rely upon his abstract knowledge, unless he be a mere proper in the dark; and then he becomes of all guides the most uncertain and dangerous. It follows, then, that as all invention presupposes a greater or less deviation from the trodden or practical path, that those who engage in it should spare no pains to acquaint themselves with all the abstract and practical knowledge and experience which previously existing modes confer. Starting from this point, and possessing what constitutes the peculiarity of the inventive genius—namely, the facility of presenting to the mind innumerable existing ideas or combinations of ideas, and framing them in such fresh fashion as is hoped will produce a mechanical structure suited to render useful, and subservient to our will, some of the resources of Nature, which have not been, but are, convertible artificially to valuable purposes. These mental structures are then subjected to the judgment, fortified by sound abstract and practical discrimination, by which these creatures of the inventive power are often dismissed by the scores before the judgment is satisfied that one of such mental productions is worth the outlay of a sixpenny-piece to give it form and substance. I have given this brief sketch of the qualities of mind necessary to success in invention, as I wish to ask Englishmen if they think their interest is consistent with treatment towards men of this mould of mind which, in many respects, is worse than that of the Jews towards their prophets?

In my letter of July 14, after throwing together most of the abstract considerations requisite to guide us to a right decision upon these inventions, so far as they could throw light on the subject, I concluded by promising, at a future time, to explain the practical part more in detail. Before doing so, however, I think it best to point attention to some further considerations of an abstract kind. All men assent in words to the desirability of preventing the loss of life that is occasioned by boiler explosions. Is there any disinterested man who will say that my boilers will not effect this. All well-informed men have seen—that if we could generate steam under high pressure with safety, the expansive principle became of more importance? But it has been held that the danger from high-pressure steam limited our efforts in that direction. Now, the abstract principles of this subject, and my practical experience for 16 years, assure me that this is only a time-honoured mistake; for, if we can make boilers as we do pistons, so much less in the surface on which the pressure acts, as we increase the pressure, we may carry it to any extent, and still greatly diminish the danger from explosion. I affirm, therefore, that sound practice and correct abstract knowledge warrant me in asserting that we can, with my boilers, carry the pressure with incalculably increased safety to any extent that the temperature will permit. I have stated, and I know I state correctly, that it is not the pressure, but the temperature, which will limit the economy and safety of the steam-engine. I will, therefore, not waste your space to treat more upon this bugbear of pressure, which, as a difficulty or danger, has no existence but with those who make difficulties where none exist, or cry out danger to the multitude, as Demetrius did to the Ephesians, to induce them to retain their errors, and enrich his craft.

Having done with the question of danger from high-pressure steam generated in my boilers, I come now to the last abstract consideration with which it is necessary to trouble the reader, and it is one of great importance, namely—that the same weight of steam generated under 200 lbs. on the inch, and expanded down to the same pressure as the steam in our most economical marine engines expanded to, that then there is nearly four times the inherent power in any given weight of steam generated under 200 lbs. as is inherent in the same weight of steam used as it is at present in our best marine engines. And as a given weight of steam contains the same quantity of heat (as before explained at all pressures), I trust I have, so far as the abstract view of the case is concerned, satisfied every philosophic consideration that all the proofs deducible from the abstract side of the question are vouchers for the full value of all I attach to these inventions. It is beyond the power of words to give an adequate idea of the manner in which my inventions have adapted the various mechanical structures, so as to bring every one of these abstract principles under human control, by neutralising all adverse phenomena, and concentrating and adapting all useful, safe, and desirable qualities to general purposes, so as to minister to the wants and increase the luxuries of mankind. On this head, the examination of the engines and boilers I have made with all their appurtenances and practical details can alone give a clear and full knowledge of what they are. If, therefore, Englishmen will not give thus much consideration, and judge for themselves, nor believe me, but trust to those who have for so long a time been a well-organised trades society, unscrupulously, after the modern fashion, using all their power and position to crush me, or wear me out by their insidious tactics—I say, if Englishmen are content to be made the tools of, to be used by such crafty sacrificers of their country's good, I am aware, and have made up my mind, that it is folly in me to use my exertions any further, in so far as England is concerned. I know, by experience, that an individual can do wonders by his efforts in scientifically combining material matter for the production of good; but to endeavour to fight against human combinations, such as beset me in England, is useless, if none of those, for whose good I have laboured, will assist me, but rather countenance my enemies than aid me in the unequal combat.

I confess I am not very hopeful that I can awaken Englishmen to their own interest in this matter, any more than to the cruelty practised towards those who, in the time of need, may be of great service to them. To show that I have grounds for entertaining these sentiments, it is now some six months since these inventions were, for the second time, brought under the notice of the Admiralty. After a considerable time, one of the officers of that Board was sent to examine an engine on my principle at Mr. Mackenzie's saw-mills. This engine was driving the saw-mills with sawdust as fuel. As I had no notice of the agent's coming, I was not in London; but he told Mr. Mackenzie's manager that, in saying the engine did the work with the sawdust and refuse of the mill, was stating more than would be believed; upon which the manager told him, if he liked, he should stand by, and see it work for a week or a month. He remained about two hours, looking at the engine and boiler at work, and left a message that he wished me to call upon him when I came to town, which I did; but it was quite manifest to me that he cared little about seeing either me or the engine, as it was evident that his decision was predetermined. I inquired if, after what he had seen, he believed the engine to be doing the work with the fuel he saw? With hesitation, he said he did, but added that such statement would not be believed. In the course of conversation, he told me that he had no faith in the expansive action of steam, as he said that they had tried it at the Government dockyards, and found no advantage from it. Now, upon this statement, I will affirm that, with such officers and experimentalists as this is a confession of, it is no wonder that England is in the position in the practical application of science by her Government officials, as I will prove, if they give me a chance—and if they will not, other nations will, if I choose to persevere—that 1 lb. of coal shall do more towards propelling a steam-vessel, used as I use it, than 3 lbs. can do by their practice, in the very best engines they have afloat. I will do this, too, with engines and boilers not more than one-third the bulk, or more than one-half the weight, of their engines and boilers. The boilers, too, shall be such as shall convince every practical and impartial person of their superior suitability for marine purposes generally, but especially for war purposes. I may be held in great contempt by these authorities and their abettors; but really, Sir, you must excuse me if I, in my turn, feel pity for the country whose vital interest is committed to the hands of such men as have been sent to decide upon the application or non-application of my inventions. In about a month after I called on the Government agent, I got the stereotyped reply—"My Lords Commissioners of the Admiralty are not prepared to make a trial of your engine."

It would be well if the public could learn whose agents these men really are. It is the fashion to throw all the blame on the Ministers of the Crown. I am one of those who differ from this view of things. The Ministers are changed often enough, I should think, to satisfy any one; but the evil still remains. Surely this is proof that it lies deeper. I also think that the manager of an extensive manufactory would cut but a sorry

figure if he had to contend with circumstances such as Government in this country has to contend with. This is a subject of grave importance, and deserves to be simply and popularly set before the minds of Englishmen. But, to return to Mr. Mackenzie's engine, which has been said to do the work of the saw-mill with its refuse. Now, the real state of things is, that not only will it do this when the mill is in full work, but the refuse will supply steam equal to as much more power as that absorbed thereby. From the experience of what my engines and boilers are capable of doing, it is no longer a problem to be solved by Englishmen, but a practically determined fact, which, as Russia has men and money, can be done by the Russians as well as by the English, or by any other people who have advanced at all beyond barbarism. But I have had made to me the sage and staggering reply, that the engine does work with the sawdust, and so will any engine; but what will it do when the work is heavy? One would think this question was answered by the fact that the more the engine does, the greater becomes the surplus steam which the sawdust will produce. But I am actually disgusted with the endless and meaningless objections which those whose object is to mislead and misrepresent have continued to broach in a private way.

I have, on several occasions, endeavoured to form a company, to assist me to place an engine on the water, to prove that, for marine purposes, the inventions are what I represent them. Some influential engineer is, of course, consulted, and of course the thing is all a misrepresentation, and I mistaken; yet, strange to say, single-handed, I have placed the matter in such a position that, if England dropped out of being to-morrow, these guides, which Englishmen have hitherto so trusted in, are proved to have been actuated (if not by trade considerations, then as certainly not by scientific knowledge or patriotic motives). The inventions are now in that state which will insure their adoption by other countries, if England continues to reject them. Some instances have come to my knowledge of capitalists whom engineers have thus prevented from joining me having lost their twenty and their forty thousands in other undertakings. What a pity the engineers did not act equally disinterestedly in tendering their advice upon such projects.

One instance will serve to show to any reflective mind the injury these men have done, not merely to me or the nation, but to capitalists and their families. About three years ago, an opportunity offered for placing an 80-horse engine of mine in a steam-vessel. The vessel was engaged in regular traffic, and all the risk the capitalist had to run was to find 4000*l.* to build the engine, and put it in the vessel. I consented that the engine should be his, and to such other conditions as were quite satisfactory to him, and to which he verbally agreed; but the engineers soon found means to determine the capitalist to decline the undertaking. He was thus frightened from a patriotic and safe investment into others less guarded by the interestedness and jealousy of engineers against the intrusion of capitalists. The result has been the loss of 40,000*l.*, and immense injury to himself and family. Now, the saving in coals alone would have been 800*l.* per annum in this one vessel. To what result such a trial three years ago would have led, in reference to England, the capitalist, and his family, I leave the reader to form his own opinion, and conclude by asking the Government to reflect upon the expenditure of 4000*l.* in such a way as engineers prevent me from obtaining from private individuals, and compare it with what the country would gain by the practical application of inventions such as these. If ever there was a case which it became the duty of a Government to look into, these inventions offer such at the present moment.—Sept. 19.

SCIENTIFIC AND PRACTICAL MINING COLLEGE, PROPOSED TO BE ERECTED IN NEWCASTLE-ON-TYNE.

Sir,—The subject of this intended college was brought before the coal-owners, from all parts of the kingdom, assembled in London, in June last, by Mr. Nich. Wood, President of the Northern Institute, accompanied by a handsome drawing, executed by Mr. A. M. Dunn, architect, Newcastle; and an unanimous vote of approbation passed, whilst printed prospectuses were issued, explaining the nature of the arrangements intended, viz.—the building of a college, to be followed by the appointment of professors, &c. But, as these matters are much confined to the knowledge of the members of the Northern Institute, I submit that some public notice of them cannot but be interesting to the readers of your Journal, which has induced me thus to address you.

It is not my intention to encroach at all upon the report of the Council of Mining Engineers, already printed and circulated; but although that report adverts to details regarding the management of the college, and of the various studies to be embraced, it has occurred to me that the public are not sufficiently apprised of the extensive views which are entertained by the projectors, nor of the universal interest which such an establishment would create, not only in this district, but throughout the whole kingdom, and even to the Continent. With regard to the seat of the establishment, it is submitted that Newcastle and the district around are pre-eminently entitled to priority, for the following reasons:—First, with respect to the production of coal, it far exceeds that of any other district in the kingdom; for the statistics lately published by Mr. Robert Hunt, of the Museum of Practical Geology, Jernyn-street, London, show that the production of coals in the counties of Durham and Northumberland, in the year 1854, was 15,420,615 tons; Yorkshire, 7,226,500 tons; Staffordshire and Worcestershire, 7,500,000 tons; Lancashire, 9,080,500 tons; Derbyshire, 2,406,696 tons; Devonshire, Gloucestershire, and Somerset, 1,492,366 tons; Monmouth, Glamorgan, and Pembroke, 8,795,500 tons; Scotland, 7,448,000 tons; whilst the whole produce of the kingdom was 64,661,401 tons: so that these two counties may be said to produce nearly one-fourth of the aggregate raisings of the kingdom.

Again, the great depth at which the coal is found in the principal mines, with its natural accompaniments of water, and inflammable (with other noxious) gases, have presented vast difficulties, which have gradually tainted and injured the mine managers to dangers; whilst they have so progressively demanded the application of science, and its resources, that the practical view of this district are universally acknowledged to stand unrivalled in this kingdom, or even upon the Continent, which fact is corroborated by the unparalleled quantity of coals raised at one shaft, with a single engine, which may be stated at from 800 to 1000 tons per day of 12 hours, from a depth of 100 fathoms, whilst the mineral is conveyed by horse and engine-power for miles underground.

The difficulties to be overcome, and the enormous capitals required to sink the deep shafts, have necessarily demanded the application of engine-power for conveying the coals along the passages of the mine, which systems have also arrived at a perfection incomparably beyond other districts.

The vast amount and variety of machinery employed in the pumping of water, and the raising of coals, with their conveyance to the places of shipment, and to the manufactories, present an inexhaustible field for study and practice; and it is upon these grounds that the claims of Newcastle are chiefly founded for the site of the Mining College; whilst, at the same time, it is contemplated to establish district schools, in connection with the college, and for the inculcation of theory along with the practice of the mines; for it is well known that the mining engineers of the Continent, although fostered and educated by the Governments, are greatly behind hand in what is termed *practical mining*. Under the patronage of this society, access to the mines would be given to the students of every degree, and from whatever country they came; whilst the fees and charges would be arranged upon the most economical and favourable scale.

The foregoing remarks apply mainly to the study and practice of mine engineering; but it is also intended to embrace all the manufacturing interests, for this district presents an extraordinary accumulation of capital and science in the various manufactures, such as iron-furnaces, malleable iron-works, foundries, glass-works, potteries, fire brick-works, acids and alkalies, paper-making, lead mining and lead manufacturing, artificial manure-making, cements, paints and colours, rope-making, flax-spinning, and last, though not least, coke-making, of the finest quality in the kingdom. It is, therefore, intended to interest these great trades, viz.—by soliciting the contribution of specimens, papers, lectures, and practical statements, as also their support by annual subscriptions of money, to make up the deficiency which may exist for a time, until the establishment shall have arrived at a state of self-subsistence; whilst it is not to be doubted that so important an institution will readily receive from the Government a similar aid to that given to other schools and seminaries of education.

The most prominent of the advances of mining science within the last hundred years may be enumerated as follows:—1. The improvements of the steam-engine, with its appendages, for the pumping of water, and the raising of coals, and especially in its application for conveying coals underground, by inclined planes and horizontal roads, the engine-boilers being sometimes below, and sometimes above ground.—2. The gradual

perfection of the art of shutting off the waters of the coal strata met with in sinking, by means of cast-iron tubing, which inventions have enabled coal fields to be attained and worked that would otherwise have been lost to the proprietors and the community.—3. The improvements in rope-making, beginning with the flat hempen ropes of Mr. Curr, and ending with the present improved state of wire ropes, which improvements have been the means of extensively conveying below ground, as well as of producing immense savings in the raising of coal.—4. The improvement in the ventilation of mines, both in respect of the general improved system of furnaces and air-currents, but also with the management and distribution of the air in the interior, as between a single current and numerous splits and crossings, which in itself produces increased ventilation; whilst different parts of the mine can be supplied with pure atmospheric air, instead of air adulterated with noxious gases.—5. The recent improvements arising from the substitution of wooden conductors, tubs, and cages, for conveying the coals up the shafts, instead of baskets, without the collision attendant upon the old system, has led to immense saving.—6. The invaluable discovery of the safety-lamp by the late Dr. Clanny, Sir H. Davy, and Stephenson, whereby collieries which produced fire-damp can now be worked with comparative safety, and in which the use of naked lights could not be trusted, and for which there was no practical substitute until the era of this invention, the advantages whereof are incalculable. In addition to the foregoing may also be enumerated the locomotive engine, with accompanying inclined planes, together with the mode of lowering the coal wagons on the decks of vessels, so as to avoid breakage; also the facilities of railway and sea conveyance of coals to the metropolis.

These various improvements may be said to be the result of mere practice, since they have all (with the exception of the safety-lamp) been conceived and carried out by the ordinary managers of mines and manufactories. But who can doubt that we have yet much to learn, that even the very steam-engine or safety-lamp may hereafter be superseded by some combination of science.

And apart from the subject of mining, what vast progress has been made in the various branches of manufacturing, and how closely they are allied to the advantages of a cheap and plentiful supply of coal, and how much may they not be benefited by the learning and science which may be fostered in this proposed college. In fine, it is intended to form this establishment upon such a principle as to enable it progressively to enlarge in proportion to the spreading of its fame. To persons who have not had opportunity to examine into the merits of the subject, it is necessary to point out in what manner the owners of property and the public may be expected to benefit in return for the pecuniary means and the patronage which they may contribute to the establishment:—

1. The landlords of the mines will be benefited by having the coal extracted in a scientific manner, whilst the scientific development of the art of mining will enable coal to be sought for, worked, and conveyed from localities which otherwise might not be available, whilst the advance of science, by still cheapening the cost of production, will naturally enable more liberal rents to be given, and to bring to market those parts of the mine which were formerly left underground, or burnt and destroyed on the surface.

2. The lessees will also profit in many of these particulars, whilst practical science, by going hand and hand with the Government and the working classes, will increase the safety of the mines, and diminish those frightful calamities which have too frequently distressed the inhabitants of the coal districts, and spread the dreadful details of explosions throughout the land.

3. The public will naturally be benefited, not only in obtaining a cheap coal, but of a corresponding cheapening of all manufactured goods in which coal is necessarily more or less employed. The shipowner, and all persons employed by him, will benefit in the employment arising from the increasing home and export trade. In short, a cheap and plentiful supply of coal, secured by scientific and practical production, will extend and ramify its benefits to every portion of the community in times of peace, and will furnish to the Government the most stupendous power for the purposes of war. In conclusion, therefore, it may be said that the projected college, by forwarding and embracing all the above subjects, is entitled to the support of all classes of the community, and the aid and patronage of Government.—Newcastle, Sept. 18.

MATTHIAS DUNN,
Government Mine Inspector.

GOVERNMENT INSPECTION.

Sir,—I trust you will again favour me with your accustomed indulgence while making a few observations on some of the topics which are justly engaging the attention of your numerous intelligent correspondents. I have, indeed, been induced to read and to re-read the letters which have at various times appeared in your valuable Journal on the important subject of accidents in coal mines, and the Coal Mines' Inspection Bill; and I have not failed to observe what has been so palpably evident in several of these letters—viz., a marked reference to certain communications having a "general tendency at variance with the best interest both of colliery owners and their workpeople." There is nothing that would grieve me more than the thought that all the capitalists and coalowners were alike hostile to the welfare of the labouring man; to firmly believe that benevolence, sympathy with labour, and a desire to promote real education amongst the colliers were in a state of negation amongst the coalowners, would be frightful and alarming in the extreme. I cannot believe any of these things, as it is my privilege to know a few of the coalowners, whose deeds are living epistles, which should be known and read by all men; and I do contend, notwithstanding Mr. Cossham's declarations and fears to the contrary, that no remarks which have been made on the high sounding appellation "scientific view," and his cunning devices at Craven Hotel, in the pages of this Journal, have had the slightest power to influence these noble-hearted men in their efforts to do good, except an additional incentive to increase their exertions in the cause of suffering and depressed humanity. I heartily wish that coalowners of this class were more numerous and more influential than they are; but it would be the height of folly and stupidity to deny that facts and deeds publicly proclaim, with unmistakable eloquence, that there are many, not only amongst the occupiers of labour in the dark recesses of subterranean caverns, but also amongst those whose labour is purchased by the light of heaven, who stoically regard the possessors of labour in the light of so many slaves or low serfs, whose destiny it is to contribute by their blood and physical prowess to the enjoyments, luxuries, and even personal safety of the monied classes. Have not the messengers of peace contributed not a little to establish and perpetuate this unholy, un-Christian, and unmanly feeling? Are they not at this very moment standing with their whitened faces directed to heaven, and holding the olive branch in one hand, and with the other adding a rhetorical grace and an emphasis to strengthen systems of physical and mental slavery, more horrid in their consequences than those which beset the pages of Pagan history? Read *Uncle Tom's Cabin*. It appears that Mr. Handel Cossham, of Parkfield Colliery, regards the discussion of things as they now stand in the light of a serious and national calamity, and he thinks that the productions of anonymous correspondents which appear in these pages should be treated with the greatest possible contempt, and also that every writer, both public and private, should append his name to his mental conceptions, with a view to strengthen their import, and overshadow or enliven their aspect, when viewed by the critical eye of a discriminating public. It is quite possible that some of the anonymous correspondents to whom Mr. Cossham refers have offended him by their severe remarks on the deeds and dark intrigues of monied despotism. If this be the case, allow me to enquire if his letter of July 21, which states such grave charges, without a fact to support them, against one of the Government inspectors of coal mines, is not a living commentary upon his incompetency to teach in *medio tutissimus ibis*? Every man has a perfect right to think that way which suits himself; so has Mr. Cossham, and I do hope that his views and opinions, to which I cannot always subscribe, will add materially to his happiness and prosperity, and that the consequences of his indiscreet and petulant communication of July 21 may not recoil with great momentum on himself. By declaiming against anonymous correspondents, is not Mr. Handel Cossham assailing a mighty phalanx, more enduring than that of Philip of Macedon, and against which he can have no hope of success? I should like to know what dignity a mere name can add to the force and beauty of truth? *Magna est veritas et prevalebit*. I must confess my conviction that there is far too much consideration awarded to a writer's name in the present day, especially when he happens to enjoy the possession of wealth and station, and far too little attention is bestowed upon the merits of the subject about which he writes. This truth is forcibly illustrated in the House of Commons, when the musical cry of divide awakens the drowsy and vigilant member from his peaceful repose, which was "with all appliance and means to boot denied to a king;" and he anxiously interrogates, "Who is it that is about to divide the House?"

Mining Correspondence.

BRITISH MINES.

ALFRED CONSOLS.—The lode in the 140, east of Field's engine-shaft, is as last reported. The lode in No. 1 winze, sinking below the 130, east of this shaft, is worth for copper ore 75s. per fm.; the lode in this level, east of said shaft, is worth for copper ore 80s. per fm. In the 80, south of Davey's engine-shaft, there is no change to notice since the last report. In the 60, south of said shaft, the ground is hard. We intend suspending the driving south, and resume driving east on the south part of the lode in this level. The lode in the winze sinking below this level, east of the Hookan, is worth for copper ore 20s. per fm.; this looks like the top of the bunch of ore which is in the 80 under this ground.—M. WHITE: Sept. 17.

BASSET GRAZE UNITED.—At Wheel Widden, we have cleared up the shaft 10 fms. below the adit level, but have not met with any cross-cuts towards the lode, which the old people say are 12 fms. The pitches here are looking well, and turning out a good quantity of lead, with stones of copper ore as usual, and the water falling back. We have nothing new in the 30 or 44 cross-cut. I have put the shaftmen to sink the north shaft to communicate with the cross-cuts in the 44, which will ventilate the mine and prove the lode. At Williams's, we have a good bunch of lead ore 6 inches wide in the bottom of the middle adit, which is looking very promising, and as we are so near the cross-course I think there is every chance of having a good lode of lead.—J. ROGERS: Sept. 15.

BEDFORD CONSOLS.—The lode at the east shaft is 5 ft. wide, and has much improved during the week, being larger, and forming itself in the north wall with a less underlay; it is producing good rocks of copper ore in the gossan, with every prospect of a good course of ore shortly. At Lady Bertha, they have a course of ore in the winze, worth 50s. per fathom, which is within a short distance of this shaft, on the same lode, and hope shortly to report the same result here. In the middle level, driving east, we have cut a branch of the lode, 6 inches wide, of rich black ore, and promises further improvement. There are droppers also coming down from the south wall, falling into the lode; the ground is easy for driving, and I fully expect a good course of ore shortly. The pitch in the bottom of the middle level is improving; the winze in the bottom of the shallow level is looking much better, and is now producing good stones of copper ore. I expect shortly to have something very good from this place.—J. HANLEY: Sept. 20.

BEDFORD UNITED.—During the past week we have intersected and cut through the lode in the 130 fm. level, east of the slide, and have commenced driving east on its course. We find the lode to be 2 ft. wide, producing good stones of ore; at present it is somewhat disordered, on account of its being so near the slide; however, it has every indication of improvement shortly. About 4 fms. to the east of the point of intersection, there is a winze sinking down from the 115, and about 8 fms. below the bottom of the level we have cut into the lode about 18 in., which we find to be good work. We shall not cut through the lode here at present, fearing that by so doing we shall let down a great quantity of water, which would greatly retard our progress in sinking the winze. In the 130 west the lode is 4 feet wide, composed of spar, mundle, and stones of ore. The lode in the 115 east is 3 ft. wide, worth 4 tons of ore per fathom. In this level west the lode continues to yield saving work. The lode in the back of this level is worth from 7 to 8 tons of ore per fm. The lode in the 103 is 2½ ft. wide, composed of spar, mundle, and good stones of ore occasionally. Jackson's stopes in this level are worth 6 tons of ore per fm. Nothing new in any other part of the mine since last report.—JAMES PHILLIPS: Sept. 19.

BOLENOWE.—In the 50 fm. level east the lode is 2 ft. wide, and letting out more water than usual. In the 30 west the lode continues 3 ft. wide. Other bargains are without alteration.—W. ROBERTS: Sept. 15.

BOTTLE HILL.—In the cross-cut north, in the 123, the ground still continues hard, great quantities of mundle, with large streams of water issuing therefrom, which indicates that we are approaching near the lode. The stopes in the bottom of the 100 fm. level is looking well; the lode is 3 ft. wide, good work for tin. The stopes in the back of the 21 and 34 fm. levels are not so productive at present as they have been for some time past. The cross-cut north in the 12 fm. level is without any change to notice.—South Lode: No alteration to notice since last report.—J. GIFFARD: Sept. 19.

BRYNFORDD HALL.—We have passed through 5 fms. of ore ground in the 50 fm. level west in Millar vein, which on the average will yield from 1½ to 2 tons per fm. The forebreast is at present unproductive. The vein, however, still continues its usual strength, and we anticipate a speedy improvement. The stopes are yielding very well. We have better ground for driving in the 30 fm. level east on Woodland's vein. At Matthew's shaft (6 fms. below the 30 fm. level) has come into proximity with a vug, 10½ fms. deep and 5 fms. long; this will very much facilitate the sinking, which can be completed for 2½ tons per fathom to the bottom, and advantage taken for a level eastward for 5 fms. All parts of the mine are moving to our satisfaction.—W. FRANCIS: Sept. 20.

BRYNTAIL.—The lode in the 10 fathom level is again 1½ feet wide, producing stones of ore, as much as 1½ cwt. in each; these splendid specimens of solid ore are found detached in the lode; the two men working the last ore at night broke about 6 cwt. from it. We have cleared up the pit at surface, in which we have found a small branch of ore, similar in character to that in the 10 fm. level. I shall now alter the ground, to ascertain the position of the end, and unless anything occurs to alter my present views, I shall commence sinking a shaft from surface on the course of the lode.—J. ROACH: Sept. 20.

BUTTERDON.—As we extend north in the 43 fm. level the lode gradually improves; it is at present 1 foot wide, composed of can and lead ore, saving work, and presents a better appearance than I have seen it at any former time.—T. GIBBS: Sept. 19.

CAE-GYNNON.—In sinking the engine-shaft under the 20 fm. level the ground is favourable. The cross-cut from the engine-shaft, to intersect the south lode, is in good ground, and the men making good progress. The 20 west continues without alteration. The stopes over this level are looking well, being 15 ft. wide. Our surface operations are going on well. The 25 tons of lead ore sold for 15s. 10s. 6d.—E. STEEDMAN: Sept. 18.

CALSTOCK UNITED.—There is no alteration in either of the drivings since last report; the cross-cuts are still letting out a quantity of water. The engine and machinery are working well, and keep the water with ease.—W. COOKE: Sept. 18.

CARNWORTH.—Since our last meeting, we have extended the 52 fm. level west from the engine-shaft 15 fathoms; the lode is 20 in. wide, producing tin. The 42 fm. level has been driven west from Pearce's shaft 15 fms., opening good tribute ground. The 30 fm. level has been driven 10 fms. through tin ground, which will pay to work on tribute. The 16 fathom level has been driven 14 fathoms, opening good tribute ground. The adit level has been driven 12 fathoms, some part of it through tribute ground. We are sinking in the 12 fm. level, by six men; the lode is in the shaft is looking well, and we are of opinion that this will do well for the adventurers. We are convinced that there is 1000 worth of tin on the surface more than at the last meeting.—J. CARTWRIGHT; T. TRENBATH; J. WALLIS: Sept. 11.

CARRACK-DEWS UNITED.—At Eley's shaft, the men have been putting in a solar, &c., in the bottom, preparatory to driving east and west; they are now engaged in dividing and casing the shaft. At Battery, the shaftmen have been fixing penthouse, shaft collar, &c., and have only just commenced sinking under the 30 fathom level. We are getting on as fast as possible with the winze from the 10 to the 20, which is necessary for ventilation. This and the work in the shafts preparatory to further sinking have prevented us taking down any lode in the ends, &c.; we have, therefore, no change to note as to the value per fathom, &c., of any of the lodes. We shall proceed with the sinking of the shafts as soon as possible.—W. HOLLOW, jun.; MARTIN DUNN: Sept. 17.

CARVANNAL.—In the 115 fm. level west the lode continues 2 ft. wide, kindly, with stones of ore. The 106 west has been suspended for the last few days, and the men are put to rise against a winze sinking under the 96 for ventilation, &c.; the lode in the 106 continues as last reported, worth 20s. per fm. We hope to sample next time about 60 tons of ore.—W. ROBERTS: Sept. 15.

CARVATH UNITED.—We have opened out on the lode in the 10 fm. level about 31 fathoms, and have a good tinney lode still in the western end, and in some places there are good stones of copper, but it is not so good east, although we have good stones of tin here. The engine-shaft is sinking rapidly for the 20, at 7s. per fathom. We have large heaps of tin stuff accumulating at surface. We have commenced to take out the foundations for the stamping-engine, and have every prospect at this time of laying out a great and good mine.—J. WEBB: Sept. 19.

CLEW BAY.—In the beginning of this week the men were engaged putting in a brace and shaft piece, and casing Boyle's shaft, which is completed above the adit to surface. The progress of the labourers in making the drain and sloping the bank has been impeded by meeting with large rocks, which they have had to blast; the stones, however, we shall find very useful for lengthening the wall on which we are erecting the horse-whim, and which we found necessary in order to properly secure it. In the latter part of the week all the men (masons, sawyers, and labourers) have been employed in getting the span beam of the whim up in its place, and quite to my satisfaction. I have sent to Galway for the ironwork, and I expect the remainder of the timber for the whim, &c., to-morrow, and will get it completed as speedily as possible. I think the shaft under the adit will have to be enlarged, it having been built for a cross-cut trial shaft. It will also be necessary to sink a winze about 20 fms. east on the course of the Bendroge lode, and form a communication by driving from the shaft to the winze in the 15 fm. level. I feel confident, from the corrodé that the water leaves, as if coming from a bunch of copper, and other appearances, that we shall soon make a good discovery, and that the ground we shall lay open in the 15 fm. level, both east and west, will be good tribute work.—J. HIGGINS: Sept. 14.

CROW HILL.—The cross-cut has been driven 3 feet last week. The change of ground named in my last was upon the floor of spar which we passed through also in sinking the shaft; this we have now got nearly through in the end. The hardness of the ground, though occasioning expense and delay, is by no means against the productiveness of the lode; it is common in the richest lead mines away from the lode, but when near it, like other mines, the ground will be easy.—Sept. 18.

CUBERT UNITED.—At Treballan, the lode at the engine-shaft from 20 in. to 2 ft. wide, composed of quartz, fluor-spar, and lead, worth 10s. per fm. The lode in the 66, north end, is 13 in. wide, composed of quartz, prlan, mundle, &c., producing some good stones of lead. The stopes in back of this level, south of shaft, are worth 10 cwt. of lead per fm. The lode in the 66, south of sump-winze, is 10 in. wide, composed of quartz, prlan, and mundle, worth for lead 12 cwt. per fm. The stopes in back of this level, north of the winze, are not quite so good for lead, worth (say) 25 cwt. per fm. The lode in the 56, south of sump-winze, is about 15 in. wide, composed chiefly of quartz, with some spots of lead. The stopes in back of this level are worth from 3 to 8 cwt. of lead per fm. The stopes in back of this level, north of engine-shaft, are worth from 4 to 12 cwt. of lead per fm. We have begun to sink Towsey's shaft below the 46, but no lode has been broken. The engine, with the pitwork, are working well.—J. TREVIN: Sept. 15.

CWM DARREN.—In the 40 fathom level, driving west of engine-shaft, the lode is large, and spotted with lead ore, but not to value. In the stopes in the back of the 40 the lode is about 4 ft. wide, yielding 8 cwt. of copper ore per fm. In the stopes in the back of the 30, east of Morgan's winze, the lode is 2½ ft. wide, producing from 8 to 10 cwt. of copper ore per fm.—A. WATERS: Sept. 18.

CWMDYLE.—In No. 6 level we have cleared out the old workings into No. 1 stopes; in the bottom we find a lode, 3 ft. wide, producing very rich ore. In Nos. 2 and 3 stopes, the north ground being removed, we have some good ore ground opened, which will greatly enhance our returns, both in quantity and quality. Together with the ore being broken in No. 7 level, we may expect better results. At Pascoe's level we are breaking some good ore on a cross-cut being ready, it will be shipped on Monday or Tuesday next.—T. COLLIVER: Sept. 15.

DEVON WHEEL BULLER.—The lode in the eastern end is greatly improved, and producing some good saving work, and every foot driven gives a better prospect in this part of the mine. The western end is looking better, and is nearly all saving work. The western shaft is daily improving, the lode about 3 feet wide, composed

of beautiful soft spar, and black and yellow ore, almost all of which must go to pile, I have no hesitation in saying we must have a course of ore close by this shaft. We have already sent to Lophill Quay about 20 tons of ore, and although our sampling may exceed 40 tons, I do not think we can make up 50 tons in time for Wednesday next, to get the ore round to the quay.—W. NEILL: Sept. 17.

DYFNGWYM.—The 60 has been driven 1 fm. 5 ft. 9 inches east along the lode; the above driving produced about 3 tons to the fm.; it will now produce more. In the 60 west 2 fms. 2 ft. have been driven on the lode, which has produced on an average 4 tons to the fm. The appearance of the forebreast is good; it opens on richer ground than we have yet seen in the 60. The winze has been sunk 5 ft. 8 in. below the 50, and cut into the 60, giving a free circulation of air there, and enabling us at once to work in the 60, with the utmost vigour. We stopped about a fm. of ground in the side of the winze, within 3 fms. of the bottom, to increase its size; this working and stopes produced about 3 tons to the fm. The 50 west has been driven 4 ft. 4 in. further on the south lode; this end is not so rich; it produced about 10 cwt. to the fm. On the side we stopped 3 fms., producing about 25 cwt. to the fm.; this is on the north lode on the side of our former drivings. In the back of the 50 west, in the western stopes, 6 fathoms 2 feet 6 inches of ore ground have been driven, producing 45 cwt. to the fathom. In the middle stopes, 3 fms. produced 30 cwt. to the fathom. In the stopes next the winze, 6 fms. 2 ft. produced about 35 cwt. to the fm. In the 50 east we have driven 1 fm. on the north lode, producing about 10 cwt. to the fm., and risen 1 fm. 0 ft. 6 in. In the back of the stopes through the 40 east, and 2 fms. 4 ft. 5 in. of ore ground stopped on the north lode, producing about the 4 cwt. to the fm. We have been able to drain and dress lead ore expeditiously up to the commencement of last week. From the date of my bi-monthly report up to the present time the water in the river has been decreasing, so that we have to trust to our reserve chiefly. This summer has been one devoid of water for mining purposes. The fall has been so short for the past eight months of the year that it should rain in torrents for the remainder of the year to bring up the annual average fall of rain. Taking this into consideration, and our water having run short, I have put all hands on the adit level to widen it, so as to have it completed by the end of this week. We are collecting water in our pool, so that as soon as we finish the adit we can go on pumping for nine days, even should no water fall in the meantime. Our lead ore account is as follows:—Aug. 17, shipped per *Elizabeth and Mary*, 21 tons; Sept. 8, shipped per *Prosperity*, 27 tons; 48 tons; dressed last report, 7 tons; dressed since last report, 41 tons. If our water had not failed, the 41 tons would have been 50 tons.—E. DAVIES: Sept. 8.

EAGLEBROOK.—The engine-shaft is now sunk 7 fms. 3 ft. below the 10 fathom level; the ground is now more favourable for sinking. We hope to be down to the 20 in about six weeks from this time. The lode in the shaft has a kindly appearance, containing much carbonate of lime and clay-slate, with occasional stones of lead and blende. The 10, west of the shaft, is now extended 13 fms.; the ground in the end is still very hard, and letting out much water, composed chiefly of porphyry and veins of white spar, with a mixture of lead and copper, about 5 inches wide, on the south wall. In the 10 fathom level, 13 fms. 4 ft. east of the shaft, we have driven a cross-cut to drain 1 fm. 2 ft. and have intersected some small branches of lead and gossan; we intend continuing this cross-cut on to the south wall of the lode. All our surface operations are going on well. The masons will finish the walls of the crushing-mill in a few days. Some parts of the castings for the crushing-mill will be on the mine next week. We shall finish levelling ground for our dressing-floors next week.—H. TRICK: Sept. 16.

EAST BLACK CRAIG.—In driving south from the plat, in the 43 fm. level, the men have a very strong sparry lode, and very troublesome for breaking, owing to the water coming through it. The 33 west is without change; the lode still spotted with lead. In the 22 west the ore seems declining; and we have put the men to sink a winze on the west end of the ore ground, to ventilate this and the level below. The pitches are much as last week.—R. WILLIAMS: Sept. 17.

EAST WHEEL GEORGE.—The sinking of the engine-shaft is progressing satisfactorily, ground as last reported, favourable for sinking. The tributaries are working with spirit, and busily engaged in dressing up their ores.

EAST WHEEL RUSSELL.—We are progressing with the 66 east with all possible speed; we are still driving on the south part of the lode. We have commenced to drive a cross-cut from the shaft to the main part of the lode in the 66 east, to the 55 east. The winze in the bottom of the level is still producing stones of grey and black ore. Our operations all through the mine are progressing satisfactorily, and our prospects in view looking very promising. Capt. Secombe was here, and inspected the mine yesterday.—W. METHERELL: Sept. 20.

ESGAR MYN.—The engine-shaft is sunk 6 fms. 3 ft. below the 40, but nothing has been done towards sinking since Monday night, when the men communicated the shaft with the old workings. The shaft was instantly filled with water, and we are, therefore, unable to state whether the bottom of these old workings has been reached, but hope to get a lift of pumps ready to work by Monday evening next, and as soon as the mine is drained will give you all possible information on the subject. In the 40 west the lode is large, and has greatly improved, now containing small bunches of ore. In the stopes in the back of the 25, east of Morris's rise, the lode is worth 1 ton of ore per fm. In the stopes in the bottom of the 20, west of Harris's winze, the lode is worth 10 cwt. of ore per fm.—S. VIAL; J. PAUL: Sept. 17.

EXMOUTH AND ADAMS UNITED.—Porter's shaft is now sunk below the 40 fm. level about 5 fms.; the ground is still favourable. We have not yet intersected any other lode in the 40 fm. cross-cut. We have commenced driving on the middle lode in the 40, where the lode is worth 1 ton per fm. In the 20 south there is no alteration since my last. In the 20 north, on the barytes lode, the ground is now disordered by a horse of kilaas; the lode is worth about ½ ton per fm. The 20 north, on the western lode, is very much improved, and worth full 1 ton per fm. In the 20 south we have commenced driving on Hampton's branch; it is a promising lode, producing about one-third of a ton per fm., with indications of further improvement. The stopes in the 20 are not looking quite so well as last reported, but are producing a good quantity of lead. Our tribute pitches are much as usual.—JAMES HAMPTON; NATH. PAUL: Sept. 19.

FEED DONALD (Aberystwyth).—The operations have been carried on on four lodes—the Smiddy vein, the lode south of the Antimony vein, Antimony vein, and the lode north of Antimony vein. On the Smiddy vein the shallow adit (A) has been cleared 11 fms., but whole ground not met with; and one sunk in the bottom of the level has been cleared, where a branch of lead, about 3 in. wide, was found in a lode, altogether from 18 to 20 ft. wide, containing stones of lead throughout. A shaft has been cleared from the surface to the middle adit (B), a depth of 7 fms., and the adit driven west into the hill 31 fms., with two cross-cuts through the lode; in this distance occasional good branches of lead have been passed through, and within 4 fathoms of the present end the lode has again become productive, and now contains a branch of lead, about 8 in. wide, intermingled with the matrix of the lode; this improvement looks favourable, as it takes place on getting near the ground which has been most extensively worked by former parties, and was found to produce large quantities of lead at the shallow workings. This adit is 10½ fms. below the one driven by the former workers. The deepest adit (C) is 21½ fms. deeper than the shallow workings, and has been driven by former workers to within 30 fms. of the present middle adit (B) end, where the lode is first found to become productive to an extent to be profitable. The clearing of this adit has been commenced, and the distance of about 40 fms. more to clear, but it is very probable that a great deal of this will be found to contain very little rubbish, and will, therefore, soon be got through. On the lode south of the Antimony adit has been taken up in the ravine, and driven west 28 fathoms; at first the lode was found to contain good veins of lead, but in the last 18 fms. it ceased to be productive, and assumed an unfavourable appearance, and has, consequently, been suspended. An adit has also been driven east on this lode from the same point, a distance of about 20 fathoms, in which the lode has been found to contain some good shoots of lead. The clearing of this lode is now stopped, and contains a rich branch of lead, which will leave a large proportion of the present ore ground. On the lode north of the Antimony adit has been driven west from the ravine about 30 fms., in which from 8 to 10 tons of lead have been broken, but in the present end the lode has become impoverished and small, and is not at present driving. On the lode north of the Antimony vein a pit has been sunk 6 ft., at present about 15 fms. west of the ravine, in which the lode was 3 feet wide, and contained stones of lead. A pit was also sunk 4 fms. 5 ft. at 30 fms. further west, where the lode presented nearly the same appearance; and another pit has been sunk about 6 ft., at about 20 fms. still further west, where the lode does not look so well. The lode is very good, although small, veins of lead traversing the bed of the river in the ravine, on the course of this lode. No lead has been driven on this lode since my last report. The scale of operations which I have proposed, and which I have been employed in this mine—two men in clearing the shallow adit (A); six men driving the middle adit (B); two men clearing the deep adit (C); two men stopping the bottom of the adit west on the lode south of the Antimony vein; two men stopping the back of the adit east on the same lode; one timberman assisting in clearing the adit, &c.; one smith; and two persons engaged in dressing: making altogether, in addition to resident agent, 18 persons. I recommend the following operations to be carried on: The middle adit (B) to be continued west with six men, as at present, as there is a great probability of meeting with good lead ground in this direction; and I have pleasure in stating that since my return from the mine a letter has been received from the resident agent, stating the lode in this place to have considerably improved, which favours the idea I at first entertained as to the result of this operation. The clearing of the deep adit (C) should be continued with the same force as at present, and when completed the level should be driven west, with expedition. The stopping of the back of the adit east on the lode south of the Antimony vein (where there is a good branch of lead) should be continued, with the same number of men as at present, and additional men should be placed there as soon as there is room for them. This adit should also be driven east with two men. The scale of operations which I have proposed, and which I have been employed in this mine—two men in clearing the shallow adit (A); six men driving the middle adit (B); two men clearing the deep adit (C); two men stopping the bottom of the adit west on the lode south of the Antimony vein; two men stopping the back of the adit east on the same lode; one timberman assisting in clearing the adit, &c.; one smith; and two persons engaged in dressing: making altogether, in addition to resident agent, 18 persons. I recommend the following operations to be carried on: The middle adit (B) to be continued west with six men, as at present, as there is a great probability of meeting with good lead ground in this direction; and I have pleasure in stating that since my return from the mine a letter has been received from the resident agent, stating the lode in this place to have considerably improved, which favours the idea I at first entertained as to the result of this operation. The clearing of the deep adit (C) should be continued with the same force as at present, and when completed the level should be driven west, with expedition. The stopping of the back of the adit east on the lode south of the Antimony vein (where there is a good branch of lead) should be continued, with the same number of men as at present, and additional men should be placed there as soon as there is room for them. This adit should also be driven east with two men. The scale of operations which I have proposed, and which I have been employed in this mine—two men in clearing the shallow adit (A); six men driving the middle adit (B); two men clearing the deep adit (C); two men stopping the bottom of the adit west on the lode south of the Antimony vein; two men stopping the back of the adit east on the same lode; one timberman assisting in clearing the adit, &c.; one smith; and two persons engaged in dressing: making altogether, in addition to resident agent, 18 persons. I recommend the following operations to be carried on: The middle adit (B) to be continued west with six men, as at present, as there is a great probability of meeting with good lead ground in this direction; and I have pleasure in stating that since my return from the mine a letter has been received from the resident agent, stating the lode in this place to have considerably improved, which favours the idea I at first entertained as to the result of this operation. The clearing of the deep adit (C) should be continued with the same force as at present, and when completed the level should be driven west, with expedition. The stopping of the back of the adit east on the lode south of the Antimony vein (where there is a good branch of lead) should be continued, with the same number of men as at present, and additional men should be placed there as soon as there is room for them. This adit should also be driven east with two men. The scale of operations which I have proposed, and which I have been employed in this mine—two men in clearing the shallow adit (A); six men driving the middle adit (B); two men clearing the deep adit (C); two men stopping the bottom of the adit west on the lode south of the Antimony vein; two men stopping the back of the adit east on the same lode; one timberman assisting in clearing the adit, &c.; one smith; and two persons engaged in dressing: making altogether, in addition to resident agent, 18 persons. I recommend the following operations to be carried on: The middle adit (B) to be continued west with six men, as at present, as there is a great probability of meeting with good lead ground in this direction; and I have pleasure in stating that since my return from the mine a letter has been received from the resident agent, stating the lode in this place to have considerably improved, which favours the idea I at first entertained as to the result of this operation. The clearing of the deep adit (C) should be continued with the same force as at present, and when completed the level should be driven west, with expedition. The stopping of the back of the adit east on the lode south of the Antimony vein (where there is a good branch of lead) should be continued, with the same number of men as at present, and additional men should be placed there as soon as there is room for them. This adit should also be driven east with two men. The scale of operations which I have proposed, and which I have been employed in this mine—two men in clearing the shallow adit (A); six men driving the middle adit (B); two men clearing the deep adit (C); two men stopping the bottom of the adit west on the lode south of the Antimony vein; two men stopping the back of the adit east on the same lode; one timberman assisting in clearing the adit, &c.; one smith; and two persons engaged in dressing: making altogether, in addition to resident agent, 18 persons. I recommend the following operations to be carried on: The middle adit (B) to be continued west with six men, as at present, as there is a great probability of meeting with good lead ground in this direction; and I have pleasure in stating that since my return from the mine a letter has been received from the resident agent, stating the lode in this place to have considerably improved, which favours the idea I at first entertained as to the result of this operation. The clearing of the deep adit (C) should be continued with the same force as at present, and when completed the level should be driven west, with expedition. The stopping of the back of the adit east on the lode south of the Antimony vein (where there is a good branch of lead) should be continued, with the same number of men as at present, and additional men should be placed there as soon as there is room for them. This adit should also be driven east with two men. The scale of operations which I have proposed, and which I have been employed in this mine—two men in clearing the shallow adit (A); six men driving the middle adit (B); two men clearing the deep adit (C); two men stopping the bottom of the adit west on the lode south of the Antimony vein; two men stopping the back of the adit east on the same lode; one timberman assisting in clearing the adit, &c.; one smith; and two persons engaged in dressing: making altogether, in addition to resident agent, 18 persons. I recommend the following operations to be carried on: The middle adit (B) to be continued west with six men, as at present, as there is a great probability of meeting with good lead ground in this direction; and I have pleasure in stating that since my return from the mine a letter has been received from the resident agent, stating the lode in this place to have considerably improved, which favours the idea I at first entertained as to the result of this operation. The clearing of the deep adit (C) should be continued with the same force as at present, and when completed the level should be driven west, with expedition. The stopping of the back of the adit east on the lode south of the Antimony vein (where there is a good branch of lead) should be continued, with the same number of men as at present, and additional men should be placed there as soon as there is room for them. This adit should also be driven east with two men. The scale of operations which I have proposed, and which I have been employed in this mine—two men in clearing the shallow adit (A); six men driving the middle adit (B); two men clearing the deep adit (C); two men stopping the bottom of the adit west on the lode south of the Antimony vein; two men stopping the back of the adit east on the same lode; one timberman assisting in clearing the adit, &c.; one smith; and two persons engaged in dressing: making altogether, in addition to resident agent, 18 persons. I recommend the following operations to be carried on: The middle adit (B) to be continued west with six men, as at present, as there is a great probability of meeting with good lead ground in this direction; and I have pleasure in stating that since my return from the mine a letter has been received from the resident agent, stating the lode in this place to have considerably improved, which favours the idea I at first entertained as to the result of this operation. The clearing of the deep adit (C) should be continued with the same force as at present, and when completed the level should be driven west, with expedition. The stopping of the back of the adit east on the lode south of the Antimony vein (where there is a good branch of lead) should be continued, with the same number of men as at present, and additional men should be placed there as soon as there is room for them. This adit should also be driven east with two men. The scale of operations which I have proposed, and which I have been employed in this mine—two men in clearing the shallow adit (A); six men driving the middle adit (B); two men clearing the deep adit (C); two men stopping the bottom of the adit west on the lode south of the Antimony vein; two men stopping the back of the adit east on the same lode; one timberman assisting in clearing the adit, &c.; one smith; and two persons engaged in dressing: making altogether, in addition to resident agent, 18 persons. I recommend the following operations to be carried on: The middle adit (B) to be continued west with six men, as at present, as there is a great probability of meeting with good lead ground in this direction; and I have pleasure in stating that since my return from the mine a letter has been received from the resident agent, stating the lode in this place to have considerably improved, which favours the idea I at first entertained as to the result of this operation. The clearing of the deep adit (C) should be continued with the same force as at present, and when completed the level should be driven west, with expedition. The stopping of the back of the adit east on the lode south of the Antimony vein (where there is a good branch of lead) should be continued, with the same number of men as at present, and additional men should be placed there as soon as there is room for them. This adit should also be driven east with two men. The scale of operations which I have proposed, and which I have been employed in this mine—two men in clearing the shallow adit (A); six men driving the middle adit (B); two men clearing the deep adit (C); two men stopping the bottom of the adit west on the lode south of the Antimony vein; two men stopping the back of the adit east on the same lode; one timberman assisting in clearing the adit, &c.; one smith; and two persons engaged in dressing: making altogether, in addition to resident agent, 18 persons. I recommend the following operations to be carried on: The middle adit (B) to be continued west with six men, as at present, as there is a great probability of meeting with good lead ground in this direction; and I have pleasure in stating that since my return from the mine a letter has been received from the resident agent, stating the lode in this place to have considerably improved, which favours the idea I at first entertained as to the result of this operation. The clearing of the deep adit (C) should be continued with the same force as at present, and when completed the level should be driven west, with expedition. The stopping of the back of the adit east on the lode south of the Antimony vein (where there is a good branch of lead) should be continued, with the same number of men as at present, and additional men should be placed there as soon as there is room for them. This adit should also be driven east with two men. The scale of operations which I have proposed, and which I have been employed in this mine—two men in clearing the shallow adit (A); six men driving the middle adit (B); two men clearing the deep adit (C); two men stopping the bottom of the adit west on the lode south of the Antimony vein; two men stopping the back of the adit east on the same lode; one timberman assisting in clearing the adit, &c.; one smith; and two persons engaged in dressing: making altogether, in addition to resident agent, 18 persons. I recommend the following operations to be carried on: The middle adit (B) to be continued west with six men, as at present, as there is a great probability of meeting with good lead ground in this direction; and I have pleasure in stating that since my return from the mine a letter has been received from the resident agent, stating the lode in this place to have considerably improved, which favours the idea I at first entertained as to the result of this operation. The clearing of the deep adit (C) should be continued with the same force as at present, and when completed the level should be driven west, with expedition. The stopping of the back of the adit east on the lode south of the Antimony vein (where there is a good branch of lead) should be continued, with the same number of men as at present, and additional men should be placed there as soon as there is room for them. This adit should also be driven east with two men. The scale of operations which I have proposed, and which I have been employed in this mine—two men in clearing the shallow adit (A); six men driving the middle adit (B); two men clearing the deep adit (C); two men stopping the bottom of the adit west on the lode south of the Antimony vein; two men stopping the back of the adit east on the same lode; one timberman assisting in clearing the adit, &c.; one smith; and two persons engaged in dressing: making altogether, in addition to resident agent, 18 persons. I recommend the following operations to be carried on: The middle adit (B) to be continued west with six men, as at present, as there is a great probability of meeting with good lead ground in this direction; and I have pleasure in stating that since my return from the mine a letter has been received from the resident agent, stating the lode in this place to have considerably improved, which favours the idea I at first entertained as to the result of this operation. The clearing of the deep adit (C) should be continued with the same force as at present, and when completed the level should be driven west, with expedition. The stopping of the back of the adit east on the lode south of the Antimony vein (where there is a good branch of lead) should be continued, with the same number of men as at present, and additional men should be placed there as soon as there is room for them. This adit should also be driven east with two men. The scale of operations which I have proposed, and which I have been employed in this mine—two men in clearing the shallow adit (A); six men driving the middle adit (B); two men clearing the deep adit (C); two men stopping the bottom of the adit west on the lode south of the Antimony vein; two men stopping the back of the adit east on the same lode; one timberman assisting in clearing the adit, &c.; one smith; and two persons engaged in dressing: making altogether, in addition to resident agent, 18 persons. I recommend the following operations to be carried on: The middle adit (B) to be continued west with six men, as at present, as there is a great probability of meeting with good lead ground in this direction; and I have pleasure in stating that since my return from the mine a letter has been received from the resident agent, stating the lode in this place to have considerably improved, which favours the idea I at first entertained as to the result of this operation. The clearing of the deep adit (C) should be continued with the same force as at present, and when completed the level should be driven west, with expedition. The stopping of the back of the adit east on the lode south of the Antimony vein (where there is a good branch of lead) should be continued, with the same number of men as at present, and additional men should be placed there as soon as there is room for them. This adit should also be driven east with two men. The scale of operations which I have proposed, and which I have been employed in this mine—two men in clearing the shallow adit (A); six men driving the middle adit (B); two men clearing the deep adit (C); two men stopping the bottom of the adit west on the lode south of the Antimony vein; two men stopping the back of the adit east on the same lode; one timberman assisting in clearing the adit, &c.; one smith; and two persons engaged in dressing: making altogether, in addition to resident agent, 18 persons. I recommend the following operations to be carried on: The middle adit (B) to be continued west with six men, as at present, as there is a great probability of meeting with good lead ground in this direction; and I have pleasure in stating that since my return from the mine a letter has been received from the resident agent, stating the lode in this place to have considerably improved, which favours the idea I at first entertained as to the result of this operation. The clearing of the deep adit (C) should be continued with the same force as at present, and when completed the level should be driven west, with expedition. The stopping of the back of the adit east on the lode south of the Antimony vein (where there is a good branch of lead) should be continued, with the same number of men as at present, and additional men should be placed there as soon as there is room for them. This adit should also be driven east with two men. The scale of operations which I have proposed, and which I have been employed in this mine—two men in clearing the shallow adit (A); six men driving the middle adit (B); two men clearing the deep adit (C); two men stopping the bottom of the adit west on the lode south of the Antimony vein; two men stopping the back of the adit east on the same lode; one timberman assisting in clearing the adit, &c.; one smith; and two persons engaged in dressing: making altogether, in addition to resident agent, 18 persons. I recommend the following operations to be carried on: The middle adit (B) to be continued west with six men, as at present, as there is a great probability of meeting with good lead ground in this direction; and I have pleasure in stating that since my return from the mine a letter has been received from the resident agent, stating the lode in this place to have considerably improved, which favours the idea I at first entertained as to the result of this operation. The clearing of the deep adit (C) should be continued with the same force as at present, and when completed the level should be driven west, with expedition. The stopping of the back of the adit east on the lode south of the Antimony vein (where there is a good branch of lead) should be continued, with the same number of men as at present, and additional men should be placed there as soon as there is room for them. This adit should also be driven east with two men. The scale of operations which I have proposed, and which I have been employed in this mine—two men in clearing the shallow adit (A); six men driving the middle adit (B); two men clearing the deep adit (C); two men stopping the bottom of the adit west on the

NANT-Y-CAR.—We have at last cut into a part of the lode in the end of the lower level, south side of the hill, and I am proud to say that the appearance is much more favourable than I expected. We have only as yet cut into a part of it, and it was late last night when we did so, consequently I cannot give you full particulars. I have, per this day's mail, sent you a box containing a fine lump of the lead.—W. V. V. **Sept. 20.**

NORTH BASSET.—In the 32 ft. level, driving west of Grace's shaft, the lode is 4 ft. wide, producing 2 tons of copper ore per fm. In the 42, west of Grace's shaft, the lode will produce 2 tons of ore per fm. In the 52, east of Grace's shaft, the lode will produce 2 tons of ore per fm. There is no alteration to report on in any other part of the mine.—T. GLANVILLE: **Sept. 15.**

NORTH DOWNS.—The men in the cross-cut, at Michael's shaft, are progressing favourably, and so are those engaged in clearing out the foundation of the engine-house at East North Downs. The masons have increased the boilers at Treleigh, and are now removing the brickwork. We shall commence carrying stones on Monday morning, to make way for pulling out the boilers, previously to having the engine out.—J. ROSEWAT: **Sept. 15.**

NORTH ROSEWAT.—I have carefully examined the barrows which were raised from underground, and I find them to be principally of light blue clay-slate, quartz, and mudstone, very much resembling the lode to be seen in the neighbouring mine (Rosewarne), and, in fact, I consider it to be of the same character as we generally find in good copper districts. From all the information I can gather from old men, who formerly worked in it, they tell me there are four lodes traversing the whole length of the set, some of which have made large quantities of ore, and which was of a superior quality. There are cross-courses known to traverse the set from south to north, and which will be of great service in cross-cutting the whole of the ground; and as we frequently find deposits of copper ore near these lodes, my advice would be, as soon as the water is let down, to continue the adit level west towards it, and then cross-cut south and north upon it, when, from the features this set presents at surface, its proximity to the celebrated Rosewarne, and the Duffield Mines, I see no reason why it should not become a good dividend-paying mine, and I consider it a safe speculation.—G. R. OSKERS: **Sept. 15.**

NORTH SORTRIDGE.—The lode in the end is about 3 ft. wide, composed chiefly of spar, mudstone, and some spots of yellow copper ore. We opened on a south lode, about 18 in. wide; this lode carries spar, quartz, prisms, and some spots of yellow copper ore, and is in a good stratum of ground, of light blue clay-slate.—J. KEY: **Sept. 15.**

NORTH WHEAL ROBERT.—At the Trial shaft on the western ground we have driven from the 20 ft. level, driving east, some fine work for ore this week. We are using every exertion to get the dressing-floors in order on this part of the mine; the other parts of the mine continue to look as well as when last reported on.—A. PAVON: **Sept. 15.**

NORTH WHEAL UNITY.—The 56 ft. level, driving east, is worth 84 ft. per fm.; the same level driving west is worth 122 ft. per fm. for copper.—Moor Lode: The lode in the 18 ft. level, driving east, is 18 in. wide, and worth 107 ft. per fathom for tin, with rich stones of grey copper ore. The 18 ft. level, driving west, is worth 97 ft. per fathom for tin, with rich stones of copper ore; this lode from the level above is greatly improved, and I believe we are very near to a good course of copper ore.—WILLIAM MOULDER: **Sept. 15.**

OLD TREWETHER CONSOLS.—The lode in the end of Wheal Thomas has improved, being now 5 ft. wide, composed of black and spar, with a quantity of mudstone, and still producing good stones of copper ore, with some lead; this level is driving the shaft 100 fms. on the course of a most promising lode, and by continuing the end in the same direction we shall intersect another lode, which is seen on the hill, and running north and south; there are also two large veins running parallel with Wheal Thomas lode, and highly mineralised, which in all mining districts are considered the most congenial of all rocks to the growth of mineral substances, and it is the opinion of most practical miners that Wheal Thomas lode cannot fail in depth of producing large returns to the adventurers.—S. KEAST: **Sept. 19.**

ORSEDD.—In the 40 we have met with a cross-cut joint, and it is rather close at present, but is producing good stones of lead ore. The winze in the bottom of the 30, on east lode, is rather tight at present, producing 7 cwt. of lead ore per fathom. The pitch in the level worked by two men is producing 8 cwt. of lead ore per fathom. The pitch in the new lode is producing 5 cwt. of ore per fm. The pitch in the bottom of the west level will produce 5 cwt. of lead ore per fm., worked by three men. The pitch in the back of the 10, worked by three men, is producing good lead; this pitch is looking considerably better. The winze in the bottom of the 10 is 20 in. wide, producing a little lead, with a favourable prospect of improvement.—W. RAMSDEN: **Sept. 15.**

PENBROKE AND EAST CRINIS.—Hunter's District: In the winze sinking in the bottom of the 30 no lode taken down since last reported. In the cross-cut driving north in the 70 the ground is still favourable. The shaftmen at Reid's are busily engaged in putting in beams and cisterns for the reception of the lift.—East Crinis District: The main lode west, in the 134, no alteration to report. The middle lode east, in the 134, no lode taken down during the past week. The lode in the 122, no lode taken down; the main lode west, in the 122, no lode taken down; the men taking down to break some work. The lode in the winze sinking in the bottom of the level is worth about 67 ft. per fm. The 112 ft. level end is still poor. The 90, east from Smith's, is much as last reported. The rise towards Wheal Unity is very wet, so we hope to make the communication very shortly. The tributors are working well, and upon an average are getting fair wages. We hope to get the new stamps to work, and the dressing-floors completed, in the course of a week or 10 days.—J. DALEY: G. T. TREWEN: **Sept. 15.**

PENHAUGH.—The state that has been put over the back during the past week has tended to give the lode a better appearance, so that we shall have to continue these steps yet higher.—T. GREENFIELD: **Sept. 15.**

PERIAN WHEAL GEORGE.—The general of this mine is much the same as when I communicated to you last.—R. DAVIES: **Sept. 17.**

PRINCE ALBERT CONSOLS.—The ground in the shaft is easier for sinking than it has been for some time past, and we are progressing very favourably.—RICHARD DAVIES: **Sept. 17.**

RHOSWYDOL AND BACHEIDDON.—The 60 ft. level has been driven 5 fms. 4 ft. 6 in. parallel with and taking a small portion of the lode; the ground is more kindly for driving, more congenial for ore, and the lode appears spotted with lead. At the end of the present month's driving we shall be under where the lode begins to make ore in the 40; we shall in the last week cross-cut through, when we expect to find it productive. The 40 has been driven 1 ft. 6 in. further south-west on the eastern side of the cross-course; the lode was unable to bear through the latter, but after taking down a great bulk of the lode we found a rib of lead running with it. Up to the present time the rib of lead has not continued, but has improved in richness; we shall drive along it as long as the lead continues. On the side of level near the end we have taken down another width of lode, containing 4½ fms. of ground, which produced nearly 2 tons of ore to the fm.; this, added to the 5 tons to the fm. before, makes the produce about 7 tons to the fm., and at the present time there is quite as much lead in the 40 as in the first month—this will again be taken down to find it productive. In the slope below this driving the men have not quite finished their bargain, when completed it will be about 11 fms., and now produces about 2 tons to the fm. In the slope east of winze 3 fms. 5 ft. of ore ground have been broken, which produced about 20 cwt. to the fm.; east of this slope 1 fm. has been driven along a branch lode, which produced about 15 cwt. to the fm. We are busily employed in extending our dressing-floors. I have ordered the necessary alterations for the crushing mill. Our lead account is as follows:—
Aug. 17. Shipped per *Elizabeth and Mary* 17 t. 6 c.
Sept. 8. Shipped per *Prosperity*, about 28 t. 0 c.
Sept. 8. Dressed to-day 1 t. 0 c.—46 t. 6 c.
Of which quantity there were 6 tons dressed last report.—E. DAVIES: **Sept. 8.**

ROBINGTON.—Harrison's lode, in the deep adit level driving east, is 2½ feet wide, yielding good stones of lead ore; the ground is congenial for ore, and favourable for driving. The stones in the back of this level, on the same lode, will yield 5 cwt. of lead ore per fathom.—J. TAYLOR: **Sept. 19.**

ROUND HILL.—The new lode in the 30, driving south-west, is at present small but still yielding a little ore. The lode in the 30, driving south of the engine-shaft, is 18 in. wide, with spots of lead ore in it, but nothing to value. The lode in the 20, south of the engine-shaft, is 4 feet wide, and will yield 15 cwt. of ore per fathom. No. 1 pitch, in the back of the 30, will yield 10 cwt. per fathom. No. 2 pitch, in the back of the 30, will yield 20 cwt. per fathom. No. 3 pitch, in the bottom of the 20, will yield 10 cwt. of lead ore per fathom. The other tribute pitches in the backs of the 20, 10, and adit levels, both north and south of the engine-shaft, are without alteration to notice since last reported. None of the castings for the pump-work at Copice shaft have yet arrived from the foundry. We have written to hasten them.—J. KERRICK: **Sept. 19.**

SEVERN.—The engine-wheel has been entirely completed this day, with the exception of coal-tarring, which I shall commence about to-morrow, weather permitting. The rods are nearly all welded together, and the wheels to carry the rods have been fixed for two-thirds of the distance from the wheel to the shaft, and will be, if all is well, completed this week. The pumps are fitted together, and ready to be taken in the shaft; in fact, everything is getting on as fast as our hands can work; from early dawn until night, I fully intend, at present that all shall be completed, and the engine set to work, some day next week, of which I will let you know again; at which time I should be most happy to see some of the committee or yourself here, to see it all, which I trust will satisfy all parties.—J. REYNOLDS: **Sept. 17.**

SORTRIDGE AND BEDFORD.—The new shaft on the copper lode has been sunk to the depth of 11 fms., on a large lode, about 5 ft. wide, with a regular underlie. The masons will finish the wheel-pit this week, when we shall begin to erect the machinery with all dispatch.—T. TREWEN: **Sept. 19.**

SORTRIDGE CONSOLS.—Hitchins's engine-shaft is now down about 6 fms. under the 40 ft. level. The lode has not yet made its appearance in the shaft, but I do not think it is far off. The eastern engine-shaft is down 5 fms. under the 40 ft. level; the shaft is stopped sinking, and put the men to cross-cut the lode at the above depth. The eastern end in the 40 ft. level has improved, and is now worth about 3 tons per fathom. In the western end in the same level the plat is nearly completed, when we shall again resume the driving. Bakerley's slopes, in the back of the 30 ft. level, are worth 12 tons per fm. Gribbon's slopes, in the back of the same level, are worth 10 tons per fm.; and the winze in the bottom of the same level is worth 3 tons per fm. Tupper's pitch, in the back of the same level, has very much improved—so much so, that it is now worth 6 tons per fm. The pitch west of the shaft is turning out good work, and the pitches in the back of the 20 ft. level are also looking well. We are getting on as well as possible with our dressing, without the aid of a crusher.—JAMES MERRILL: **Sept. 20.**

SOUTH BEDFORD CONSOLS.—I have nothing new to report this week, no change of importance having taken place.—J. PHILLIPS, jun.: **Sept. 19.**

SOUTH CREWEN.—We have sunk the engine-shaft about 6 fms. below the 64, at 262 ft. fathom. In the rise in the back of the 84, west of flat-rod shaft, the lode is 1½ ft. wide, producing stones of ore. In the 74, east of engine-shaft, the lode is 1½ ft. wide, producing 1 ton of ore per fm. There is no change in the ground in this adit, being still tight. In the 64, east of Gore's, the lode is 1½ to 2 ft. wide, and will turn out 1½ ton of ore per fathom. The stones in the back of this level, east and west of Gore's winze, are looking very well. In the 54, east of Gore's, the lode is 1½ to 1 ft. wide, producing stones of ore, not to value. Our tribute throughout the mine is without much alteration since last report.—JOHN DELBRIDGE: EDWARD CREWEN: **Sept. 15.**

SOUTH DEVON GREAT CONSOLS.—The lode at the engine-shaft has not been taken down during the past week; the ground continues hard and troublesome, which is occasioned by numerous branches of spar and capel passing through the shaft, evidently belonging to the lode. In driving the 37 ft. level west we have met with it appears to be about 18 in. wide, of a kindly appearance, containing spots of ore. In driving westward this lode will soon unite with the lode in the end, and as far as we can judge from its present bearing and underlie, it will form a junction with the lode at the shaft a little below the 50, and if there is not a good course of ore found at that

point I shall be greatly disappointed. In the adit cross-cut we continue to meet with branches of spar, spotted with copper ore. The end is letting out more water than usual.—J. COCK: **Sept. 19.**

SOUTH ROBERT AND SORTRIDGE UNITED.—We have opened upon the south lode, which is 12 feet wide, composed of gossan, spotted with black copper ore, the strata being precisely similar to Sortridge Consols and North Wheal Robert. No. 2 north lode has been opened upon a considerable distance; it is 4 feet wide, composed of gossan and quartz, of a promising appearance. We still propose the continuance of these lodes through the entire length of the set, and I have no doubt of shortly making a good discovery equal to some of our neighbours.—J. PONSOR: **Sept. 19.**

SOUTH WHEAL TOLGUS.—The lode at Michael's shaft is not looking so well; it is now 8 inches wide, with some ore in it, and the ground is very hard for sinking. The lode in the 90 east is small and poor; in the 90 west, towards Youren's lode, the ground is very hard for driving. The 78 west is worth 1 ton of ore per fathom. We have put the men of the 60 west to rise against Rod's shaft, to drain the old mine, and for ore. The lode in the 22 north is looking better, it being wider, and more ore in it; the lode in the 22 south is split into branches in the eastern end, in the western end the lode is about 9 in. wide, saving work. The lode at Morcom's shaft is still poor. The lode in the 30 east is small and poor. We have cut the lode west of the cross-course in the western end, which is 2 feet wide, but poor at present. In the 20 east the lode is 2½ ft. wide, with a little ore in it.—Sept. 14.

SPEARNE CONSOLS.—We are extending the 12s fathom level, west from the Guide engine-shaft, and have to report that the lode in this end is 18 in. wide, and good tinstuff. We beg to state that the back and bottom will work on tribute; 7 fms. behind this end we have a slope working, with a lode of tinstuff 12 in. wide. We are also extending the 116 and 92 ft. levels west from the same shaft, in tribute ground; lode in 92 ft. level, west, 14 ft. wide, 14 ft. deep, 14 ft. wide, and 14 ft. deep. We are also sinking a winze from the 116 to the 128 ft. level, in a good run of tin ground, and expect in from four to six months to hole on the 128 ft. level; and after this work is completed we hope to return more tin monthly. As recommended at the last meeting, we still think that the better way will be to sink the Guide engine-shaft; and also to call on the lords, requesting to give up their dues during the time the shaft is sinking; at any rate, our opinion is that this will be best for all parties.—JOHN CARTWRIGHT: WILLIAM TREWEN: **Sept. 11.**

ST. AUSTELL CONSOLS.—The tin lode at Dowson's 23 end west is looking quite as good as ever, and is increasing in size, being from 3 to 4 fms. in width; in the end east in this level we have a small branch of rich yellow copper ore, which I believe will open as we get off from the cross-courses. In the 15 ft. level we have not yet cut the north wall of our lode, I am daily expecting to meet it. At Young's shaft, in the 25 end east, we are driving on the north wall of the lode, as our object is to immediately hole this level with the 25 at Dowson's. Dowson's shaft is sunk under the 25 about 8 feet, the ground is very good.—Sept. 13.

—At Young's shaft, the end east driving on the side of the lode is better for driving; the other parts of the mine are much as usual. We are commencing to make preparations for a new stamp, getting down stone, &c., and next week we shall begin to level out floors, &c. When our new stamps has got to work it will throw a light on the value of this property.—R. H. WILLIAMS: **Sept. 13.**

TALIESIN.—The east end in the bottom of the winze is producing 1 ton to the fm.; the west end is not so good as the east, but still improving. The lode is 5 feet wide, intermixed with ore all the way. The slope in bottom of the adit, east of the winze, is producing 12 cwt. per fm. The tribute pitches are looking much the same as last week. We have removed the winze, but not quite completed it, and we have two days' work to do at the shaft. I will sample the ore next week.—W. WILLIAM: **Sept. 15.**

TAMAR MARIA.—We have driven west 8 feet on the course of the lode, as requested, and have taken down a part of it, which has a very different appearance to that on the eastern side of the cross-course, the lode being fully 1½ foot wide, composed principally of gossan and quartz, and no doubt but it will show a still greater improvement when taken down to the point named above. I strongly advise driving in this direction, a little further, when I hope to send you better news.—J. HOPKIN: [This trial is made experimentally, to see the lode on the western side of the cross-course, the workings on the eastern side being most discouraging.—J. B. BALCOMBE.]

TAMAR SILVER-LEAD.—In the 215 ft. level there is a very considerable improvement, the lode in the end being 3 feet wide, and producing 14 cwt. of ore per fathom. The lode in the 205 is 1½ foot wide, and returning good stamps work; and the slopes in the back of this level are yielding on an average 8 cwt. per fathom. In the 190 ft. level the lode has lately been disordered by a small flooken course crossing the end, and returning at present but 1 ton of ore per fathom. The slopes in the back are producing as follows:—No. 1, 1 ton 13 cwt. per fathom; No. 2, 2 tons; No. 3, 1 ton 10 cwt.; No. 4, 1 ton 5 cwt.; and No. 5, 1 ton per fathom. The slope in the back of the 175 is yielding 9 cwt. per fathom, and the 160 slopes are returning favourably.—W. ROBINSON: **Sept. 17.**

TEES SIDE (CUMBERLAND).—I inspected some of the shallow workings, but the most important part of the mine, Tees Side, was, owing to the alteration being made in the draining machinery, under water. I went into the adit on the Metal Band veins, in which I found a great extent of levels opened on very fine looking lodes, large, and generally containing an admixture of lead. These lodes have in places been extensively worked in the backs, and must have yielded considerable quantities of lead. A shaft has been sunk in this part of the mine, which I understand is 20 fms. deep, and that which seems likely to succeed in yielding a profit, is the Tees Side Mine. This mine has been sunk to a depth of 21 fms., and large quantities of lead returned from it; but, as I have before stated, in consequence of alterations being made in the draining machinery, I was unable to see it. This mine will soon be drained, as every thing seemed ready to commence pumping when I was at the mine, and I have since learnt that the machinery is working very well. Seeing the highly metalliferous district in which the set of Tees Side is situated, and the favourable results which have followed the operations hitherto carried out, there seems every probability of your having a profitable mine, with very little further outlay.—W. C. VIVIAN: **Sept. 18.**

TOKENBURY.—Our setting-day being yesterday, the following bargains were set: The 52 cross-cut to drive south of D lode by two men, 2 fms., at 2½ ft. per fathom; the 52 cross-cut to drive south of D lode by two men, 1 fm., at 1½ ft. per fathom; the lode 2 ft. wide, composed of spar, peach, and capel, with occasional spots of yellow copper. The same level to drive west on Jenkins's lode by two men, 1 fm., at 97 ft. per fathom; the lode 14 inches wide, composed of spar, peach, capel, and mudstone. The same level to drive east on Trelease's lode by two men, 1 fm., at 57 ft. per fathom; the lode 18 inches wide, composed of spar, capel, peach, and mudstone. The lode in the engine-shaft, sinking below the 52, is from 2½ to 3 feet wide, composed of spar, peach, black and yellow copper, not enough of the latter to value; sinking at 17 ft. per fathom. These men have not completed their former bargain, and the tributors are looking for a new bargain. We are proceeding with the fixing of the new engine as fast as possible. Since my last the condensing elctern is made, and in course of fixing. The masons are busily engaged in building the boiler-house and flues.—Sept. 15.

TRELEIGH CONSOLS.—The ground at Carr's engine-shaft is not so good as it was; a floor of hard quartz has made its appearance, which, for the present, retards our sinking. The horse-wheel at Nicholson's having been erected, and the accumulated stuff brought to surface, the men have resumed cutting down the ground east and west of the winze. The men in Wheal Catherine adit have gone through and secured two crushers in the cross-course, and, judging from appearances to-day, two or three days more will suffice to finish this work; and hence, the cost for the future will be reduced.—J. PRINCE: **Sept. 15.**

TRELOWETH.—The lode in the 90, east of engine-shaft, is large, and will yield 2½ tons per fathom of copper ore. The ground in the 90, west of engine-shaft, has improved, and is now worth 1 ton of ore per fathom, and will yield 1 ton of ore per fathom. In the 80, west of engine-shaft, the ground is hard. At Woodfield's shaft the water is drained to the 20, by a flat-rod from the engine, and we are clearing the level west, to see the lode west of the cross-course. The quantity of water is not much, and the lode has a promising appearance, which we hope to see more about in another month.

TRENOW CONSOLS.—The lode at the engine-shaft has very much improved this last week. The 80 ft. level west has also improved. The 70 ft. level east is still looking well. In the 70 west there is no alteration since last report. The lode in the 60 ft. level west is 2½ ft. wide, all saving work for copper ore. The lode in the 60 ft. level east is 2 feet wide, containing good stones of ore throughout. All our slopes and tribute pitches throughout the mine are looking well. At Carn Perra, we are looking very much better. On Friday the 7th inst. we sold 124 bushels of tinstuff, which realised 147s. 9s. 5d.—J. SMITH: T. BENNETT: **Sept. 19.**

VALLEY OF TOWY.—At Clay's engine-shaft, the diagonal shaft sinking under the 30 ft. level, the ground is without alteration in the past week. In the 30 ft. level north the lode is 3 feet wide, producing ¾ ton of lead per fathom; south of Field's shaft, in same level, the lode is as last reported, producing good stones of lead. The lode in the 20 ft. level, driving south, is 2½ ft. wide, improving, producing 4 cwt. of lead per fathom. Nothing done in the past week in bottom of the said level for want of men. Our tributors are working well, and I believe getting wages.—S. THOMAS: **Sept. 18.**

WELSH POTOLI.—Report of Esgrair-hir and Esgrair-fraith Mines: The rise No. 1, in the back of adit Esgrair-hir, is a little improved, yielding 1½ ton of lead ore per fm. Wilkinson's slope, east of No. 1, No. 2 slope, west of No. 1, in the back of the adit, and the two new slopes in the bottom of the adit, east and west of winze under No. 1, are just as when last reported. No. 3 level, in the adit west of footway shaft, is improved, yielding 2 tons of lead ore per fm. No. 3 slope, in the back of the adit west of footway shaft, is yielding 1½ ton of lead ore per fathom. The 10 ft. level, west of footway shaft, is yielding 2 tons of lead ore per fm. Nos. 4, 5, 6, and 7 slopes, in the back of the 10 ft. level, west of footway shaft, are just as when last reported. The 10 ft. level, driving west from old engine-shaft, is progressing favourably; I hope to communicate with the 10 ft. level driven east from the winze, under No. 1, in the course of two months. At Esgrair-fraith bog shaft, sinking under the shallow adit on the course of the lode, the lode continues to improve in depth, producing at present good saving work for the crusher. The deep adit level is just as when last reported. The dry weather retards our dressing operations very much.—R. DUNN: **Sept. 18.**

WEST COLLABE.—The pitches are still looking well, and the men getting good wages. In the 67 ft. level east the shaftmen have driven about 6 ft.; the lode is 2 ft. wide, composed of prisms, capel, and spots of ore. I have put four men to clear and secure the 32 east, and when cleared shall at once be driven; in the rise in the back of the 52, east of cross-course, the lode is 3 ft. wide, producing good stones of ore, and every appearance of improving going up. In the rise in the back of the 40, east of cross-course, the ground is favourable for rising; the lode is 15 inches wide—saving work. We are clearing and securing the different levels as fast as circumstances will admit. I must still recommend your driving the 67 ft. level west, as I have every reason to believe you will find a good lode in that direction, judging from the level above.—CLARKE: **Sept. 19.**

WEST PARR CONSOLS.—We have driven in the north cross-cut this week about 4 feet 6 inches, and on the lode east 5 feet. We intend in a few days to take down some of the lode, to see what it is. The ground at the shaft is much the same as it has been.—T. FLOYD: **Sept. 19.**

WEST SORTRIDGE CONSOLS.—We are pushing on with all possible speed the cross-cut towards the lode in the 20 ft. level. The lode in the 10 ft. level is increased in size, but it is not so good either for tin or copper; but I hope, ere long, to have an improvement again.—JOHN PAVON: **Sept. 18.**

WEST WHEAL CARPENTER.—The end is progressing very satisfactorily; we are carrying the end 4½ ft. wide, in a beautiful gossan; price 35s. per fathom; the lode is still large to the north of the end, composed of gossan, quartz, and capel. We are sinking the shaft to the east of the end, where the lode is of the same character, at 55s. per fathom.—J. KEY: **Sept. 20.**

WHEAL CREBOR.—Our shaftmen are making good progress in sinking; the ground is congenial for ore. The 54 and 44 ends are just as last reported. In clearing the winze from the 24 to the 34 we find the main lode is standing whole to the south. Yesterday we broke some good stones of ore from the lode with a pick, but to know its value we must complete the clearing and make some holes in it; this will require a week or more from this time. I believe we have a chance of opening good ore ground in that direction, being all whole ground for a great length. The tributors in general are improving, particularly in the bottom levels, and most of the tributors are working with good spirit, and making wages in their respective tributes. Set since last setting-day a winze below the 24 to clear and secure by two men, at 10s. per fm., and re-let the 54 at 47, 10s. per fm., stented the month. The engine, pitwork, and other machinery, are in good working order.—W. DOBLE: **Sept. 19.**

WHEAL GRENVILLE.—In the 85 ft. level the cross-cut driving south is still in the granite, which is much the same for exploring; but I am of opinion the granite is changing, it looks more congenial for making ore, and, according to the plans, we are not far from intersecting the lode. In the 70 ft. level cross-cut driving north we have driven nearly 2 fms. in elvan, and we are not yet through it; the colour of the elvan has changed very materially, it is now of a light colour, and not so hard as it was, which I consider to be a favourable indication. We have put the Newton engine to work, and it works very smoothly. We have not yet forked out the water, but all being well, it will be in fork by Monday morning, when we shall commence sinking the shaft as vigorously as possible, and after I have seen the lode I will write you immediately. The old engine, since we have finished her, works satisfactorily.

—I have this day been enabled to go to the bottom of the Newton shaft, and I find a beautiful white granite coming into the bottom of the shaft; consequently, I am expecting this change will have a good effect on the lode. The 20 ft. level is only extended about 10 fms. west from the engine-shaft, and about 6 fms. to the east of it. I broke several samples from the lode, some of which produced good work for tin, which is of a superior quality. I have, therefore, no hesitation in stating that I consider our prospects to be very good indeed.—G. H. OSKERS: **Sept. 17.**

WHEAL GUSKUS.—The lode in the 70 ft. level, west of engine-shaft, on Guskus, is now about 3 feet wide, producing occasional stones of tin. In the 60 ft. level, west, on the same lode, it is worth from 107 to 127 ft. per fathom for tin. The slopes both east and west of Raw's winze, in the back of the 60 ft. level, are worth from 121 to 147 ft. per fathom for tin. The 30 ft. level, west of Rapson's shaft, on Martin's lode, has improved since last reported, and is now worth 57 ft. per fm. for copper ore. The 20 ft. level, west of Rapson's shaft, on this lode, is producing occasional stones of copper ore. The other parts of the mine are just the same as when last reported on.—G. FRANCIS: **Sept. 18.**

WHEAL MARY GREAT CONSOLS.—The engine-shaft is down 9½ fathoms below the 62 ft. level. The 62 ft. level east is without any important alteration; the 62 ft. level west is improved, now worth 2½ tons of good quality copper ore per fm. The lode in the 25 ft. level east is promising, and will, we think, lead to good results as well as building the engine-house, and hope to get it up in about three weeks from this time. We have four men working in the back of the 62 ft. level, where the lode is worth full 3 tons of good ore per fm. The pitch in the back of the 62, west from the engine-shaft, will yield about 1 ton of ore per fm.—T. RICHARDS; J. TAYLOR: **Sept. 18.**

WHEAL MAUDLIN.—The water is still rising on us, being now 3 fms. above the bottom level. The tributors will get up as much ore as possible before their pitch becomes inundated. I expect the water will continue to rise while the dry weather continues.—WM. TREGAY: **Sept. 15.**

WHEAL SURPRISE.—The 12 ft. level, driving east, is increasing in size, and spotted throughout with copper ore; the end is producing good stones of copper ore. The shaftmen are sinking rapidly in good ground, and will complete their bargain in the time specified. Everything looks well for a good discovery in the 24 ft. level. We are clearing out the cross-cut, in order to see the south lode, at which point I expect to have something good to report. All other operations are progressing satisfactorily, and promise good results to the adventurers in a short time.—T. DUNN: **Sept. 15.**

WHEAL TEHIDY.—There has been but little alteration in the levels since last week. The 70 west has a promising appearance, and is opening tribute ground.—D. LANKSBURY: **Sept. 15.**

WHEAL TREFUSIS.—Field's Lode: We have cut down Juleff's shaft about 14 fms. below the surface, and timbered it complete. We are getting on as fast as possible with building the engine-house, and hope to get it up in about three weeks from this time. We have four men working in the back of the 15 ft. level, east of boundary shaft, at 9s. tribute.—Z. CARKEER: **Sept. 20.**

WHEAL TRELAUNY.—Smith's shaftmen are making preparations to sink under the 120 ft. level. We have commenced to drive the cross-cut in the 120 ft. level towards the lode. The lode in the 108, north of Smith's shaft, is 1 foot wide, worth 107 ft. per fathom; in the same level south it is 1½ foot wide, worth 87 ft. per fathom. In the 98 north it is 1½ foot wide, worth 87 ft. per fathom; in the same level south it is 1½ ft. wide, worth 77 ft. per fathom. In the 88, north of Clippindale's, it is 1 ft. wide, worth 67 ft. per fathom.—South Mine: Trelawny's shaftmen are still driving in killa by the side of the lode in the 130 ft. level, south of the shaft. The lode in the 129 is about 2 feet wide, worth 87 ft. per fathom; in the same level north the men have commenced today to take down the lode, the size and value of which we will give you in our next report. In the 107 south it is 3 feet wide, worth 87 ft. per fm. The slopes and pitches are producing much as usual. We sold on Tuesday last a parcel of lead ore, computed 63 tons, to Messrs. Sims, Williams, Nevill, and Co., at 21s. 12s. 6d. per ton.—W. BRYANT; W. JENKIN: **Sept. 18.**

WHEAL TRISTREM.—The ground in the 66 end, on the north wall of the lode, is greatly improved, and should it continue so favourable for driving as at present we shall soon reach the cross-course. The cross-cut in the 62 is without alteration. The lode in the 52 still continues about 4 ft. wide, and is producing tin; there is a large strong gossan on the north side of the end. We have not taken down any of the new lode in the 40 cross-cut during the past week.—J. JENKIN: **Sept. 18.**

WHEAL WREY.—The summen are still engaged about the pitwork for the 60-in. engine. The lode in the 33, south of the engine-shaft, is 3 ft. wide, producing 12 cwt. of lead ore per fathom. In the same level north it is 1½ ft. wide, producing ¾ ton of lead ore per fathom. In the 23 south it is 3 ft. wide, producing ¾ ton of lead ore per fathom. In the same level north it is 3 feet wide, producing ¾ ton of lead ore per fathom. In the 12 north it is 1 ft. wide, producing good stones of lead occasionally. The slopes are producing much the same as usual. The northern shaft, sinking for ventilation, &c., is down 6 fms. from surface. We shall sample on Friday next two parcels of lead ore, about 130 tons.—J. CLYMO, jun.; W. HANCOCK; R. ROSKILLY: **Sept. 19.**

WHEAL ZION.—The men at Richard's shaft, during the past week, have been cutting plat and securing the shaft; this being completed, we shall now be enabled to sink with greater speed. The lode in the 66, east of engine-shaft, is without alteration, still producing stones of ore. In the 50, east of Richards's shaft, the lode still continues to produce some saving work. The character of the lode in the slopes in back of the 40 is much as last reported, worth 1 ton of ore per fm. We have communicated Thomas's winze with the 50, and the men are now stopping east and west of it, and are looking for a new bargain. We are proceeding with the driving of the engine-shaft, on middle lode, the lode is 4 ft. wide, character very promising, producing 2 tons of ore per fm.; the slopes in back of this level continue to look well, worth 2 tons of ore per fm. The pitch in back of the 50, and all other bargains, are much the same as last reported on.—J. BRAY: **Sept. 19.**

WOOD MINE.—There is no lode taken down in the north end in the 25 ft. level during the week; in the south end in this level we have had a branch of ore in the bottom, yielding some saving work; this branch does not reach so high, as the back of the end runs out to a splice. In this end we expect to reach the

been raised; and the silver-lead realising about 19l. per ton, it possesses every element of becoming a most profitable investment. We hear of a sett between Rosewarne and the once-renowned Herland Mines, in Gwynedd, which is about to be re-worked in a spirited manner; the miners in the neighbourhood entertain very sanguine feelings of its proving an adventure of a more than ordinary character. A previous company expended a large sum in opening the mine, but were unable to proceed for want of suitable machinery to draw the water. Callacombe is spoken of as much improved. The first sale of 80 tons of ore will take place on the 20 inst. It is expected, judging from the prospects, that in less than six months the shares will be double their present price. In the Sortridge district, many mines have recently sprung into existence, since Sortridge Consols have proved so productive; those amongst them most likely to succeed, are Great Sortridge and West Sortridge. Many of the others have nothing to recommend themselves at present; whilst the remainder cannot be viewed with other than suspicion, from the efforts to bring them into public estimation, by reports of the most unfounded description."

SUCCESSFUL MINING.—At meetings during the week 26,935l. 4s. has been paid in dividends. Wheal Buller, 20l. per share; Devon Great Consols, 9l.; Spearre Moor, 1l.; Wheal Mary Ann, 1l.; West Basset, 12s. 6d.; Linares, 10s.; Hington Down Consols, 5s.; Carnyorth, 3s.; Lusitanian, 2s. 6d.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET, London, Sept. 22, 1855.

COFFER.		S. s. d.		BRASS (sheets) . . . lb.		12½d.	
Sheathing and bolts . . . lb.	0	1	2	Wire		11½d.	
Bottoms	0	1	3				
Old (Exchange)	0	1	0½				
Best selected	120	0	0	Foreign		17 6-	
Tough cake	126	0	0	To arrive		12 6-23 10	
Tile	126	0	0				
South American	110 0-12 0-0			In sheets		31 0-0-	
IRON.				TIN.			
*Bars, Welsh, in London . . .	9 15 0-10 0-0			English, blocks		126 0-0-	
*Ditto, to arrive	9 2 6-9 5 0			Ditto, Bars (in barrels) . . .		127 0-0-	
*Nail rods	10 0-10 10 0			Ditto, Refined		131 0-0-	
*Stafford, in London	11 10 0-12 0-0			Banca		126 10-0-	
*Bars, ditto	11 0-11 10 0			Straits		123 0-0-	
*Hoops, ditto	12 0-12 15 0			TIN-PLATES.			
*Sheets, single	13 0-13 10 0			IC Charcoal, 1st qua. p. box .		1 14 6-1 15 0	
Fig. No. 1, in Wales	5 0-5 5 0			IX Ditto 1st quality		2 0 6-2 1 0	
Refined metal, ditto	8 0-8 10 0			IC Ditto 2d quality		1 12 8-	
Bars, common, ditto	8 0-8 10 0			IX Ditto 2d quality		1 18 6-	
Ditto, railway, ditto	8 10 0-8 15 0			IC Coke		1 8 6-1 9 6	
Ditto, Swed. in Lon. for 11 . . .	10 0-15 10 0			IX Ditto		1 14 6-1 15 6	
Ditto, No. 1, in Clyde	4 10-4 2 0			Canada plates		14 10 0	
LEAD.				In London; 20s. less at the works.			
English Pig	24 0-24 10 0			Yellow Metal Sheathing . . . lb.		11½d 1s	
Ditto sheet	25 0-0-			Wetterstedt's Pat. Met. . . p. wt.		2 2 0	
Ditto red lead	24 0-25 0 0			Stirling's Non-Jamika . . .		9 0-9 2 0	
Ditto white	26 10 0-29 0 0			Surface Rails		5 0-5 2 0	
Ditto patent shot	26 10 0-27 0 0			Stirling's Patent		5 0-5 2 0	
Spanish, in bond	23 0-0-			Toughened Pig		4 0-4 5 0	
American	none.			Ditto		4 0-4 5 0	
FOREIGN STEEL.				Indian Charcoal Pigs . . .			
Swedish, in kegs, to Arr.	0 0-0-			In London		6 10 0	
Ditto, in fagots	20 0-21 0 0						
English, Spring	21 0-22 0 0						
QUICKSILVER.				In Liverpool 10s. per ton less.			
*In Liverpool, 5s. per ton less.				At the works, 1s. to 1s. 6d. per box less.			
*At the works, 1s. to 1s. 6d. per box less.							

REMARKS.—Our market continues much in the same position as last reported. The demand for metals generally has been moderate, and there has been an absence of speculation to any considerable extent. The steadiness of the market has in some instances enabled sellers to obtain improved rates, but with the exception of lead and sheet zinc, prices have tended downward rather than otherwise.

COPPER.—There is at present no change to notice; but although at the last meeting of smelters no alteration in prices took place, in consequence of the high prices of the raw material, buyers should bear in mind that the demand continues excellent from all quarters, and that there is no reason to anticipate but that the smelters will take the earliest opportunity of announcing an advance. At the Swansea ticketing, on Tuesday, 1748 tons of ore were sold, and 2349 tons advertised for the next sale.

IRON.—The amount of business doing in this metal during the past week has been comparatively unimportant, in consequence, no doubt, of the uncertainty as to the rise which will be decided on at the approaching quarterly meetings of the trade, and the opinion being held from unanimous on the question. Welsh bars are quoted somewhat lower, but Staffordshire have in some instances realised 10s. per ton more than they did last week. Rails are in great request, but from the fact of the ironmasters being fully supplied with orders, and indisposed to accept present rates to any extent, even for distant deliveries, not a great deal of business has been transacted. The increased prices for Staffordshire iron has not in the least checked the demand, and for export there is, indeed, if anything, a better enquiry. Scotch-pigs have been steady, but inactive, prices fluctuating but little. There is at the present moment but little doing, and the prices quoted are:—No. 1, g.m.b., 81s. 6d.; No. 3, 79s. 6d.; and mixed Nos., f.o.b. at Glasgow, 80s. 6d.

LEAD.—Another advance of about 10s. per ton has taken place in this metal, as will be seen by our quotations, and the consumption of pig-lead has become so excessive that the supply is quite inadequate.

SPELTER.—Several parcels for arrival have changed hands at 23l. 10s., since which the market has been steady at from 23l. 12s. 6d. to 23l. 15s.

ZINC.—A rise of 1l. per ton was reported on Wednesday.

TIN.—English has been dull of sale, with no variation in value. Some long-held second-hand parcels of Banca have been pressed upon the market at declining rates, otherwise this description remains firm, at about the late sale price, 75s. being the last price paid in Holland. Straits has realised good prices, and remains very firm at our quotations; few parcels on the spot. It is difficult now to find buyers for arrival.

TIN-PLATES.—The market is now perfectly free from second-hand parcels, but prices have not improved.

STEEL in fair demand, at moderate prices. Swedish keg mostly taken for arrival. **QUICKSILVER**, the same as last reported.

GLASGOW, SEPT. 20.—Since our last advice the market was further affected by the money market, the price falling on Tuesday to 79s.; yesterday it rallied suddenly to 80s. 6d., at which we remain firm, with little business. At the ironmasters' meeting, yesterday, it was resolved still to resist the demands of the miners. It is hardly probable that the men will go in without a further struggle. The legitimate demand continues very healthy, and shipments would be large but for the scarcity of vessels. For America the demand is very good. To-day's quotations are:—No. 1, g.m.b., 81s. 6d.; mixed numbers, g.m.b., 80s. 6d.; No. 3, g.m.b., 79s. 6d. Shipments for the week ending Sept. 15:—Foreign, 3968 tons; coastwise, 6133 tons = 10,101 tons. In the corresponding week of 1854 they were:—Foreign, 5160 tons; coastwise, 8942 tons = 14,102 tons.

LIVERPOOL, SEPT. 20.—We have to report continued firmness and activity in our metal market. Scotch-pig Iron during the week has fluctuated from 82s. to 79s., without inducing any business of moment. Prices are to-day a shade firmer, and buyers are rather more plentiful at 80s. on time, sellers asking 6d. more. The demand for all kinds of Welsh and Staffordshire manufactured iron continues unabated, and is, if anything, on the increase. Large contracts have been entered into for forward delivery in anticipation of orders, and the general impression is that a large business may be confidently looked forward to. Tin-plates, Lead, and Copper are all extensively enquired for, and makers cannot keep pace with the demand. The advanced rates which are being established do not appear to check the demand, as it was apprehended would be the case; on the contrary, buyers are apparently more anxious to operate. Zinc sheets have advanced 20s. per ton. In Spelter, foreign Steel, and foreign Tin, we hear of no transactions. The following are the quotations:—Iron: Merchant bar, 8l. 5s. per ton.—Tin: Common block, 126s. per cwt.; common bar, 127s.; refined block, 131s.—Tin-plates: Charcoal, 10, 33s. 6d. to 34s. per box; coke, 10, 28s. 6d. to 29s.—Lead: Sheet, 25l. per ton; pig, 24l. 10s.—Spelter (oak), 25l. per ton.—Zinc (sheet), 31l. per ton.—Copper: Bolt and sheathing, 1s. 2d. per lb.; tile and tough cake, 126l. per ton; best selected ditto, 129l.—Yellow metal sheathing, 1s. per lb.—Steel: Swedish keg, 18l. 10s. to 19l. per ton; fagot, 20l. 10s. per ton.

PARIS, SEPT. 20.—The principal feature in our Metal Market this week has been the apparent determination of the various warehouses to raise their prices, the reason put forward for such a course being the high rates demanded by the French mines, and the rise in the Glasgow and Champagne markets. From the scarcity of French produce, Scotch iron is in good demand; Welsh, however, does not sell so easily, although there is a much larger stock on hand. The *Ancres* states that at St. Didier the position of the market continues favourable. According to M. Fremin, there are in Savoy (as in Georgia and Caucasus) sources of carbonised hydrogen gas, which can be made useful for lighting and warming. In a note addressed to the Academy he states:—"In the common of Chatillon (Savoie), on the road to Chamouny, there exists, over a large surface of the soil, conduits of inflammable gas. Some persons have considered this a sure indication of the presence of a coal mine beneath, and, conse-

quently, the proprietors of the soil have set to work sinking a shaft for the purpose of proving it. In sinking this shaft, which is already to a depth of 20 metres without any discovery, it is found that on putting a lighted match to the orifice of certain subterranean conduits existing in the wall of the shaft, the gas instantly ignites, and fills the whole shaft with flame. A man descended the shaft in my presence to set fire to one of these conduits, but an accident occurred in consequence of my curiosity. The instant the experiment was made the flames burst forth with such unusual rapidity that, notwithstanding the celerity with which he was drawn up, his hair and the skin of both his arms were burnt. Having followed the man into a neighbouring house, where he could obtain such assistance as his case demanded, I was further surprised by a new matter for observation. In the kitchen floor I was shown a hole, made with an ordinary gimlet; on applying a light to which, gas escaped in such quantities as to take fire, and give a light, which might be compared to that furnished by a large burner of ordinary manufactured gas. The combustion continued until arrested by stamping on a certain spot in the floor, which experience has made known. Twenty times was the experiment repeated in my presence, and it was always perfectly successful. The mistress of the house informed me that during last winter she profited by the light afforded, by adapting to the above hole a tube of elder tree."

Messrs. Maitland and Co., of rue Neuve-des-Capucines, state that "In the Bank of France shares there is scarcely any variation. The shares of the Credit mobilier have been largely dealt in, but matters have not gone so smoothly with this establishment as hitherto, and a stop has been put on the rise in the shares, which at one moment promised to pass uninterruptedly to 2000 fr. Although the company constituted itself for 99 years, there was an impression that the Council of State only authorised its statutes for 30 years, and as they have given notice of the issue of bonds reimbursable in 90 years, some confusion has arisen. It is, however, understood this difficulty does not really exist, and that the company is authorised for 99 years, nevertheless the Credit mobilier will limit their issue of bonds to 120,000, instead of 240,000, as originally intended. In conformity with Art. VII. of the Deed, the company is bound to hold in its possession Government stocks, shares, or bonds for the whole amount of the bonds they may issue. In railways, an active business has been carried on in the shares of the Societe autrichienne. We have already pointed out the probability of a dividend of 35 fr. per share; this we are happy to hear confirmed, and some parties consider it may even be 45 fr. to 47 fr. 50 c. per share. There is now a question of conceding to this company the Lombardo Venetian Railways, with a terminus at Trieste. It is also considered that the opening of a branch of the Credit mobilier at Vienna will do much good to the company, and cause a rise in the exchange of the florin from its present price of 2 fr. 10 c. to about the par quotation of 2 fr. 50 c. Shares in the Ardennes Railway continue in demand, it being generally believed the arrangements for a fusion with the Est, before alluded to, are completed. The Midi continues in favour with the public, and although quotations have not varied much, the market for our principal lines of railway has been firmer than for some time past. Shares in the Sardinian Railway have also been much in request, at 520 fr. The shares in the Caoutchouc Companies continue to attract attention at our quotations, and we fully expect that the Compagnie nationale du Caoutchouc soule will, within a short date, be placed under the auspices of the Credit mobilier, who monopolise for the moment, at all events, most of the best undertakings in this market. With regard to the Belgian Metal Market, we extract the following from the *Journal de Charleroi*:—"The transactions in cast and wrought-iron, during the week, have been numerous, and prices have an upward tendency, notwithstanding the recent rise. In ore there is nothing doing. The preparations for the winter coal trade are progressing satisfactorily, and a good business is, from present prospects, anticipated."

MINES.—An improvement has taken place in the price of one or two stocks this week, but the business transacted is still comparatively small, whilst the new regulation of the Mining Exchange, which does not admit of any quotations being given except of business done in the room of the Exchange, makes the Official List look very insignificant indeed. We have, however, done our best to supply the deficiency, by giving a daily list of purchases and sales made by members out of doors, and which may be regarded as perfectly authentic. It would appear that the new regulation as to marking the Official List has not given entire satisfaction among the members, for although the plan adopted by the committee last week is that pursued on the Stock Exchange, and is the best for insuring a correct list, there is yet some justice in the remark that at present the body of members is too limited for such an exclusive act. Much, if not the greater part, of mining business at present is done, as we stated last week, out of doors—that is, amongst the clients of the different brokers and dealers, and when this is done by members of the Exchange, it is argued that it might fairly be quoted in the Official List, especially, too, as the daily prices, published by individual members as "business done on the Stock Exchange" (the publication of which has been adopted since the formation of the Mining Exchange), are not from the Official List of that body, but represent chiefly business done out of doors by a few of the members. We are amongst those who think that too much publicity cannot be given to mining, and to transactions in shares when fairly and properly quoted, and we doubt not the Committee of the Mining Exchange, who have only one object in view, that of rendering the institution worthy of public support, will reconsider their late decision, and adopt some method whereby the Official List may be the acknowledged organ of all share transactions which are properly vouched. We are glad to hear it is the intention of several more gentlemen to join the Exchange: numbers are much required to make an open market, but many have been hitherto deterred from membership by the high rates of subscription, and it might be well for the committee to reconsider this also.

Wheal Cliffs have advanced to 350, a rise of more than 100l. within a fortnight, the cause of which we are not at present able to report, very little information respecting the mine being furnished, even to shareholders. West Seton shares have reached 450, and the mine is turning out even beyond expectation. On the 18th Aug. we referred to a great discovery in the 112 ft. level, and it appears the lode has since been cut in the 124 as rich, if not richer, than seen above. Devon Consols, 410 to 420; Wheal Grenville, 3½. Alfred Consols have advanced to 16; there is no fresh discovery in the mine, but a steady improvement in the different ends. Sortridge Consols advanced to 7½; North Basset, 36; North Basset in request, at 29 to 29½; East Basset, 45 to 47; Clifflah and Wentworth flat; East Buller, 8 to 8½; South Tamar, 7½ to 7½; this mine has considerably improved of late. Tincrofts have been in good demand, and a large business doing, at 3½ to 3½; Tamar Consols, 2½ to 2½; Rosewarne have been flat, and offered at 230; Stray Park enquired after, at 10½; Condurrow, 135 to 145, and a good business doing; in West Sortridge rather more business doing, at 5s. to 7s.; East Tolgus, 25 to 26; West Frances, 19½ to 20½; Wheal Basset, 780; Wheal Frank Mills, 2½; Mary Ann, 38 to 40; Craddock Moor, 25; Hender, 5 to 5½; Copper Hill enquired after. Mary Ann has paid a dividend of 14 per share.

SATURDAY, SEPT. 15.—Official List: Condurrow, 122½; Lady Bertha, 1½ to 1½; Sortridge, 6l. 6s.; West Seton, 400 to 410; West Frances, 19½; Wheal Edward, 3½.—Non-official: Rosewarne, 235 to 240; Grenville, 2 to 2½; West Frances, 19½; Hender, 5 to 5½; Condurrow, 125 to 127; Sortridge, 6½ to 6½; Edward, 3½ to 3½.

MONDAY.—Official: Cargill, 15½; Great Sortridge, 11s. 3d., 10s., 11s., 9s., 10s. 6d., 10s., 11s.; Lady Bertha, 33s. 3d. to 33s. 9d.; Rorrington, 1s. 9d. to 2s.; Sortridge Consols, 6 5-16, 6 7-16, 6½, 6½.—Non-official: Basset, 760 to 780; North Basset, 28½ to 29½; Great Vor, 15s. 6d. to 16s.

TUESDAY.—Official: Great Sortridge, 10s. 6d. to 11s.; Rorrington, 1s. 10d., 2s., 2s. 6d.; Wheal Arthur, 13½ to 14.—Non-official: Sortridge Consols, 6½ to 6½; Lady Bertha, 1½.

WEDNESDAY.—Official: Great Sortridge, 11s.; Lady Bertha, 1½; Sortridge Consols, 6½.—Non-official: Condurrow, 132½ to 135; North Basset, 29½; Alfred Consols, 16½; Sortridge Consols, 6½ to 7.

THURSDAY.—Official: Ivybridge, 27s. to 28s.; St. Day United, 1½; West Sortridge, 5s.; West Frances, 20s.—Non-official: Sortridge, 6½ to 7; Arthur, 14; Grenville, 3½.

FRIDAY.—Official: Sortridge Consols, 7 1-16, 7 3-16, 6 15-16, 7, 7½, 8d., 7½; Stray Park, 10½, 10, 10½; Frank Mills, 2½; Great Badner, 10s.; Wheal Arthur, 14; West Seton, 450; West Collacombe, 10s.; Rosewarne, 240; Cargill, 15½; Vale of Towy, 20s. to 21s.; Wheal Grenville, 3; Alfred Consols, 15½ to 16; Ivybridge, 28s., 29s., 28s.; St. John del Rey, 27 to 27½; Tincroft, 3½; Trefusis, 9½; South Zion, ½ to ½; Lady Bertha, 29s., 31s., 27s. 6d., 28s. 6d.; Great Sortridge, 11s.; North Basset, 29½; Wh. Zion, 2; Wh. Wrey, 8½; Collacombe, 40 to 42; Trefusis, 2½.

The following business has taken place on the Stock Exchange during the week, although the greater portion of the transactions are not officially announced in their List:—

SATURDAY.—Tincroft, 3½ to 3½; Condurrow, 120; Sortridge Consols, 6½; Wheal Edward, 3½; Tamar Consols, 2½; Great Wheal Vor, 15s. 6d. to 16s.

MONDAY.—Great Wheal Vor, 15s. 3d. to 15s. 9d.; Sortridge Consols, 6½, 6½, 6½; Great Sortridge, 10s. to 12s.; Lady Bertha, 1½ to 1½; Hawkmoor, 8s. to 10s.; Swanpool, 50s. to 60s.; West Sortridge, 4s., 4s. 6d., to 5s.; West Par, 12s. 6d. to 15s.

TUESDAY.—South Devon Consols, ½; Alfred Consols, 14½, 15, 16; Sortridge Consols, 6½, ¾; Lusitanian, 1½, 2, to 1½ prem.; Lady Bertha, 30s. to 35s.; Great Sortridge, 11 to 12; Devon Buller, 2½ to 3.

WEDNESDAY.—Great Sortridge, 10s. 6d. to 11s. 6d.; Alfred Consols, 16 to 16½; Sortridge Consols, 6½, 6½, to 6½; Buller and Basset, 4½.

THURSDAY.—Datten, 2½; Sortridge Consols, 7; Lady Bertha, 1½; Great Hewas, 2s., 2s. 3d., 2s. 6d., to 2s. 9d.; Devon Buller, 2½ to 3; West Collacombe, 12s. 6d. to 13s. 6d.; Great Wheal Vor, 15s. 6d. to 16s. 6d.; Cwm Datten, 5s. to 5s. 6d.

FRIDAY.—Great Sortridge, 10s. to 12s.; West Sortridge, 5s. to 6s.;

* Since this was written, the committee, at their meeting this afternoon (Friday), have rescinded the objectionable resolution, and taken other steps to obtain a correct Share List, and which this (Friday) afternoon shows a better appearance.

Sortridge Consols, 7; South Zion, ½; Lady Bertha, 1½; Lelant Consols, 17; Buller and Basset United, 4½; West Collacombe, 12s. 6d. to 13s. 6d.; Great Wheal Vor, 15s. 3d. to 16s. 3d.; North Wheal Basset, 28½; Pedra-an-drea, 2½ to 3; Devon Buller, 2½ to 3; Wheal Kitty (Uy Lelan) 37½ to 40; Lelant Consols, 17.

The quarterly sales of copper ore at Swansea to end of Sept. 1855, as follows:—11,262 tons, which realised 171,114l. 10s. The last quarter was 13,200 tons, realising 199,083l. 6s. 6d., showing a deficiency of 13 tons, and 27,968l. 16s. 6d.—owing chiefly to the short arrivals from Cobro Mines. On the contrary, the ticketings for copper ore in Cornwall will exceed the former quarter by 861 tons, and some thousands of pounds in money. This is very gratifying, as it shows the continued prosperity of our home mines. A new purchaser of copper ores has started in the Swansea ticketings (Mr. Charles Lambert, from Chili), whose purchases during the quarter have been 475 tons, amounting to 4804l. 3s. We should hail the hour most gladly, were he to take a similar standing in Cornwall having an agent there, we look forward to his doing so at no distant day.

The directors of the Devonshire Great Consolidated Copper Mining Company, at their board meeting, held yesterday, declared a dividend of 9216l., being 9l. per share, out of profits from sales of copper ores sampled in the months of May and June last; after payment of which there remains in hand a balance of 25,533l. 19s. 11d., in cash, ore bills not maturity, and reserved fund, applicable to the company's general purposes.

At Wheal Buller meeting, on Tuesday, the accounts showed—Balance last account, 1831l. 9s. 3d.; ore sold in June and July (less dues), 8847l. 7s. 4d.; sundry receipts, 14l. 8s. 1d.—10,693l. 4s. 6d.—Mine costs and merchants' bills, July and August, 3687l. 15s. 5d.; on account of income tax, 150l.; by dividend 5120l. (20l. per share); leaving balance in hand, 1755l. 9s. 3d.

At West Basset Mine bi-monthly meeting, on Wednesday, the accounts showed—Balance last audit, 6312l. 2s. 9d.—less dividend of 4500l. (15s. per share) 1812l. 2s. 9d.; by sale of copper ore, 8185l. 2s. 10d.; advance on tribute, 500l.; account of tin sold, 31l.—10,521l. 5s. 7d.—Mine cost for June, 2346l. 18s. 6d.; July, 2003l. 9s. 9d.; advance on account of tribute, 510l.; royalty, 1573l. 9s. 10d.; leaving a balance of 4287l. 7s. 6d. The prospective accounts for the two months show, after payment of present dividend, a balance of 3370l.

At the Isle of Man Mining Company meeting, held in Chester, on the 6th inst. (Mr. Thos. Dixon in the chair), the capital account showed—Stock account estimated value of the works at the formation of the company, 58,000l.; new capital expended, as per last statement, 3322l. 18s. 1d.; ditto since expended, 4540l. 10s. 6d.—64,063l. 3s.—To 2240 shares, at 25s. each, 56,000l.; 320 new ditto, at 25s. each, call up as per last statement, 8000l.; arrears since paid, 936l.; second and third calls new shares, 2641l. 12s.: leaving balance in favour of adventurers, 625l. 11s., and balance of the revenue account, from July 1, 1854, to June 30, 1855, was 1008l. 13s. A dividend at the rate of 16l. per cent. per annum, from July to June, on the capital was declared. Messrs. T. Dixon, W. Wardell, and H. Hodgson were re-elected directors, and Mr. Charles Hodge elected in place of Mr. Thomas Johnson, who retires, and Mr. Nicholson was also elected auditor for the ensuing year. The report stated that the directors, in laying before the proprietors their second annual report, had great pleasure in congratulating them upon the not only improved but very satisfactory position of their property at the present time. During the past year the greatest vigour had been displayed in opening out new ground, and in developing the resources of the mines. It appears, from Capt. Bowden's report, that the old engine-shaft in Beckwith's Mine has been sunk nearly 14 fathoms under the 117 in the north part of the vein. This mine has been very productive during the past year, and large reserves of ore have been laid open in the 102 and 90, which can be worked at a very moderate tribute. At Old Foxdale, the directors are very anxious in being able to inform the proprietors that the new engine-shaft has had the desired effect of draining the old workings.

At Wheal Mary Ann meeting, on Monday (Capt. Peter Clymo, jun., in the chair), the accounts showed—Balance last audit, 1131l. 11s. 11d.; ore sold, May, 1934l. 11s. 6d.; ditto, June, 1961l. 17s. 6d.; ditto, July, 2237l. 13s. 1d.; calls received, 72l. 10s.; labourers charged, but not paid, 7s. 6d.; Wheal Wrey adventurers, for materials, 5l. 12s. 6d.—6346l. 13s.—Mine cost and merchants' bills, April (including lord's dues, 159l. 10s. 10d.), 1825l. 6s. 9d.; ditto, May (lord's dues, 140l. 7s. 4d.), 1840l. 4s. 11d.; ditto, June (lord's dues, 149l. 17s. 11d.), 1837l. 1s. 1d.; Wheal Treliwain, water charge for three months, to end of June, 112l. 10s.; leaving balance in favour of adventurers, 731l. 10s. 3d. A dividend of 512l. (1l. per share) was declared, where, after payment, left to credit of next account, 219l. 10s. Capt. Peter Clymo, jun., Henry Hodge, and Robert Knapp, reported that the mine and pitches were producing much as usual. They sampled on Friday the 14th in a parcel of lead ores, computed 75 tons, which will be sold this day (Saturday).

At Spearre Moor Mine quarterly meeting, at Penzance, on the 12th inst., the accounts showed—Balance last audit, 94l. 10s. 2d.; sundries, 14l. 3s. 7d.; ore sold, 12 tons 11 cwt. 9 qrs. 20 lbs., 818l. 4s. 6d.—925l. 18s. 3d.—Labour cost for April, May, and June, 429l. 12s. 9d.; merchants' bills, 1637l. 1s. 2d.; leaving balance in favour of adventurers, 3327l. 4s. 4d. A dividend of 280l. (1l. per share) was declared; with available balance of 527l. 4s. 4d.

At Spearre Consols Mine quarterly meeting, on the 11th inst., a call of 2s. 6d. per 100 shares was made to cover the loss incurred in the three months and as further outlay is required, in order to sink another 10 fms., it was agreed ask the lords to forego their dues until the concern is once again in a dividend-paying state, which is looked forward

Notices to Correspondents.

* Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly filed on receipt: it then forms an accumulating useful work of reference.

SALES OF ORES.—We are preparing our usual Statistical Returns of the Sales of Copper, Tin, and Lead Ores, for the quarter ending Sept. 30, and shall feel greatly obliged for all particulars that may be furnished. Purchasers and others are reminded, that by accurate returns being forwarded to us on the termination of the quarter, the produce of their mines being properly reported will be insured, and the occasional complaints of inaccuracy avoided.

ASTURIAN MINING COMPANY.—Sir: An "Original Allottee" of the Asturian Mining Company kindly mentions my name in your valuable Journal of the 15th inst., and suggests the best possible plan, in my opinion, to prevent this considerable property from being entirely lost. On August 6, I wrote to one of my friends in the City, that I was ready to act; and, if seriously called on to do so, I had made my mind up to defend, to the utmost of my power, in Paris or Madrid, the interests of the English shareholders. I am able to say now, that it is not without reasonable hope of succeeding quickly and energetically. —BARNES MOREAT: *Chateau de Cateau, par Guiraud (Loire Inf.), Sept. 17.*

"T. G. S." (Baker-street).—Mr. J. H. Lundt, who was entrusted with the negotiation of the sale of the Asturian Copper-Works, left this country in the latter part of June, and it was stated that his absence would be for about a month. We have not heard that he has returned, nor are we able to give any account of the prospects of the works being resumed. The cause of their abandonment was a failure in the German method of smelting. An English mining captain was sent to report on both the mines and reducing establishments.

MR. ENNOR'S EXPERIENCE.—How it may be made SERVICEABLE AND VALUABLE.—Sir: In common with many of your readers, I have to acknowledge myself indebted to Mr. Ennor for his valuable communications, which I always read with pleasure. But it has occurred to me that he might render very considerable benefit to adventurers in mines by abandoning, as unworthy his great abilities, the remarks he has too frequently made of late, and confine himself to the more important matters of mining operations, such as giving good advice to speculators, and not being on points of but little importance to the public. Mr. Ennor would, in my opinion, do more service to the mining world, and much more justice to the country at large, if he would enforce the good old principle of endeavouring to get a promising hole, and then sink and drive with all possible speed, which is the only plan that can be pointed out to obtain success in mining. —AN OBSERVER: *Sept. 19.*

"A Subscriber" (Abingdon).—We invariably adopt the suggestion of our correspondent, giving the amount of dues, mine cost, &c.; but in many instances the accounts are made up in such form, that we are unable to publish the items mentioned.

MR. GREAT CONSOLS MINE.—Sir: Without entering into a consideration of the various letters you have received on the management of this mine, permit me to correct an erroneous impression which a statement made by a "Shareholder" (Northampton), in your Journal of last week, is calculated to create. He says, "Nor do we see any regular account of the sales of ore." Whether a "Shareholder" sees any regular account or not is, of course, no business of mine: I can only say that an account has regularly appeared in the *Mining Journal* of every sale of ore made by the company; and I would refer him to page 73 of the present year's Volume for particulars of the first sale; page 233, for the second sale; page 345, for the third sale; and your present number, for the fourth sale. —THOS. LEWIS, *Purser: Birmingham, Sept. 19.*

MR. LOW'S PATENT, AND THE EXTRACTION OF GOLD FROM ITS MATRIX BY SMELTING.—Sir: Will any of your numerous correspondents, who have paid attention to the above subject, examine Mr. Low's patent, and say if its process is not "as old as the hills," and identical with that carried out by Mr. Baldwin, at the Cornish Mines, some years ago? —DOUBT: *London, Sept. 18.*

THE MINING EXCHANGE.—We have received several letters having reference to the members and management of this establishment. The names of the members are before the world, therefore any statement respecting them can only appear with the writer's name attached. With the rules passed for observance in conducting the business proceedings, there may be a difference of opinion as to their necessity, or effect, but there can be no question but the committee are actuated by one only motive—that of attaching a more *bona fide* character to mining business, with the object of creating a more popular public feeling towards the investment in mining undertakings.

WHEAL GURKUS.—Mr. Jeffrey, of the Mount Carbon Company, is the secretary, and the offices are now at Cannon House, Great Queen-street.

ASTURIAN MINING COMPANY.—Sir: I observe with much pleasure a letter in your last week's Journal from "An Original Allottee," respecting the affairs of this most unfortunate company. I perfectly agree with your correspondent, that some decisive steps should be immediately taken in order to preserve the remnant of our property; but allow me to add, in common fairness, that at this moment our sole surviving director, Mr. Kenneth Mackenzie, is in Paris, whether for business or pleasure, or a combination of both, as "An Original Allottee" infers, I am at a loss to guess. Let us hope that on his return he, in conjunction with the trustees, will devise such means as may be found satisfactory to their constituents, who have embarked such large sums in this unfortunate undertaking. They must be up and doing, if they would save the wreck from Senor de Guiraud. Our interests were entrusted to them, and failing all other means, it becomes an incumbent duty on us to look to them. —JUSTITIA: *Cornhill, Sept. 19.*

"A Shareholder" (Pimlico).—The half of the dividend, both on the preference and consolidated stock, will be paid some time in October. The Company of Copper Miners in England lost little more than 1000*l.* by the failure of Messrs. Strahan, Paul, and Bates.

"D. C. P." (Chelms).—The mine is unquestionably a valuable property, and there can be no opinion but that the shares would be taken up, provided the incompetent parties who have hitherto mismanaged it were to retire from the direction. So soon as the so-called manager evacuated the property, the ores were of a higher per centage and the returns better. In due justice to him, according to all received accounts he endeavoured to raise them to a still higher per centage, but having no knowledge of dressing, he wasted nearly as much ore as he obtained, and that got was at such a cost that it did not pay the expenses. There was no honesty of purpose displayed by the promoters, and although they might be exceedingly clever in ushering such things into public notice, experience proved they were totally incompetent as managers, inasmuch as they spoiled a good property; and the only just inference that can be drawn is that they were speculators, who never regarded mining as an investment, but endeavoured to extract as much out of the public by the sale of their shares as possible. They professed to say that a certain amount of capital was subscribed, when they were perfectly aware that of their own quota they had scarcely contributed a shilling, in comparison with that paid by others.

FRIGATE CONSOLS.—"J. W." The mine is situated at Llanfangel, Croydon, Cardiganshire. We have been informed that, each have been offered for the shares, but we believe at the present time there is no market for them.

MODEL OF A LEAD MINE AT THE CRYSTAL PALACE.—Sir: Having been given to understand that the Crystal Palace contained a well-executed model of a lead mine, a friend of mine proceeded there for the purpose of making a drawing of it, but not finding what he sought, he applied to Mr. Deane, of the exhibitors' department, and was informed there was nothing of the kind in the Palace. As it seems odd that so curious an optical delusion should have occurred to my informant, can any of your readers enlighten me on the subject, or tell me where a model of a lead mine can be seen. —F. ROBINSON: *Fenchurch-street, Sept. 20.*

MELBOURNE, SYDNEY, AND ADELPHI CHARTERED BANK.—Sir: In your last Journal, "A Reader" enquires whether the committee of shareholders are sitting, and when they will publish their report? From enquiries I have made, I understand the committee are proceeding in their duties, and that the report may be expected in November. —C. S.: *Sept. 20.*

SOUTH ROBERT AND SORTRIDGE UNITED.—Sir: In reply to the statement in last week's Journal, I beg to say that I have since taken more particular notice of the bearing of the lodes in the neighbourhood, and I find Lady Bertha, Devon Buller, and Yeoland lodes to be just in a line; the latter your correspondent acknowledges to be two miles south of South Robert, &c., which clearly proves that those lodes cannot pass near this sett. If Mr. Pimley knows of no other lodes on Roborough Down than Yeoland, I have no hesitation in saying that he knows but very little about the neighbourhood. I still contend that the Yeneton iron course passes through the sett, as we can easily trace it from the Down by the red stains in the ground at the surface, being many fms. wide. One thing more I would add, that such incorrect statements are a serious injury to legitimate mining. —P. H. BARRATT: *Zetrislock, Sept. 19.*

GRAY CAMBRIAN MINING COMPANY.—"H." (Leeds).—A very excellent offer has been made, to take this property upon lease, that would eventually partially relieve the shareholders; but the affairs are so entangled by law proceedings, that it is expected considerable difficulty will arise in making out a good title to the mines.

MEXON GREAT CONSOLS COPPER MINING COMPANY.—Sir: I am sorry you could not insert the whole of my letter, in reply to "An Old Subscriber" and Mr. Whitehead's letters, as they were filled with misrepresentations which I sought to expose. I should not, however, have troubled you again, had not you, in your condensation, made an error which it is necessary should be corrected. You represent me as saying that there is no necessity for an additional agent, "as the mine is to be inspected by Capt. Eddy." My letter said, "as the mine has so recently been inspected by Capt. Eddy." I would, in conclusion, ask "Shareholder," who writes in your last Journal, what he means by his recommendation "to wind-up the mine, in case the last call proves insufficient, rather than carry on a mere speculation?" Can he point to any of the progressive mines not paying costs (a very small proportion of the whole number) which are not speculations; and would he, on this account, have them all knocked? —AN ORIGINAL SHAREHOLDER, RESIDING IN WARWICKSHIRE: *Sept. 20.*

LEADS TOWN CONSOLS.—"One close Home" should append his name to the letter he wishes to appear. It could hardly be expected that such a letter would appear without being so authenticated, that the party complained of should know the writer.

FOX TOR.—Sir: For the information of "Observer," I would remark that the Fox Tor was brought out by a committee, who, without, as I can learn, paying on a single share, issued many, and that without ever holding, during the two years of its existence, one meeting. The purser being equally reprehensible; for, after selling tin to produce 20*l.*, he allowed the property to become forfeited, while the miners, for arrears of wages, had recourse to the Stannary Court, which ordered the sale of the machinery, the proceeds of which might, perhaps, satisfy their demands. Latterly, I perceive the shares have been marked $\frac{1}{2}$; although their real value it would puzzle any shareholder to testify. —A. Y. N.: *City, Sept. 19.*

HORTON'S STRAM BOILER.—We will give the information required, if possible, next week. A descriptive prospectus is now being printed, which will be noticed in the usual column of the *Mining Journal*.

"A Scientific Man" (Derby).—Although at the British Association, at Glasgow, Mr. Evan Hopkins's theory was discarded, that, in the course of geological changes, England had once been in the Torrid Zone, and in time would be in the Arctic Circle; however strange this may appear, to a certain extent he is borne out by several of the Scandinavian naturalists. Pastor Lestadius, one of the greatest botanists of the day, has demonstrated that Pinarum, Lapmark, and several of the more northern regions of Norway and Sweden, are less favourable to vegetation now than they were two centuries since; in fact, many trees and plants that did then live cannot now exist there.

REVERBERATORY FURNACES.—Sir: In your Journal of the 8th inst., an announcement appeared, from Mr. C. Dodsworth, of Haydon Bridge Iron-Works, to the effect that Mr. Addison, of Penrith, had, five years ago, invented a smelting-furnace similar to the double reverberatory furnace patented by Mr. Alfred Jenkin. The statement did not in the least concern the proprietors of Jenkin's patent, in any other sense than that the assertion was calculated to lead the unwary into error, resulting from the supposition that the bold statement was correct; and to obtain the necessary information respecting Mr. Addison's furnace, in order to lay the circumstances of the injurious statement before the legal advisers of the proprietors of Jenkin's patent, Mr. Jenkin went to see Mr. Addison's furnace, when, to his amazement, he found nothing in the world but the old copper furnaces, one above the other, precisely the same as were used dozens of years ago, the defects of which are too well understood by practical smelters to require repetition, and which defects it is now proved practically that Jenkin's patent completely remedies. —ONE INTERESTED.

"G. G." (Lincoln).—The Anglo-Californian Gold Mining Company, some time since, sent out funds to redeem their property, which was effected with unusual advantage. So soon as the rainy season sets in, operations will be commenced. The next general meeting will be one of considerable interest.

GREAT CAMBRIAN MINING AND QUARRYING COMPANY.—"An Old Subscriber."—This company may be considered to be virtually at an end. The attempt to raise new capital proved a failure; they are now entangled by Chancery proceedings, and are deeply in debt. Mr. Moss, of Finner's Hall, Great Winchester-street, was the gentleman who last attempted to resuscitate the company, and will, no doubt, furnish our correspondent with any particulars he may require.

EAST BULLER.—"A Subscriber."—The number of shares in this mine are 1024, and not 2000, as stated by Mr. Treddinick, in his notice which appeared on the 8th inst. The present price is $8\frac{1}{2}$ to $9\frac{1}{2}$ per 1024th share.

We have received a communication respecting the proceedings at the recent meeting of the adventurers of the Trebravah Mine. Space prevents its appearance in our Journal of this week, but it will appear in our next.

In course of preparation, a NEW NUMBER of The Mining Manual, Almanack and Guide.

To be continued annually, price 3s. 6d.

The contents will comprise elaborate Statistical Returns of Mines and Metals; comparative values of Shares; lists of Dividends and Calls; all the Home and Foreign Mining Companies, their directors, committees, and officials. Names and situation of the Collieries and Iron-works in England, Wales, Scotland, and Ireland; together with a valuable selection of Miscellaneous Information, of use to the Capitalist, Miner, and Adventurer. —Office, 26, Fleet-street, London, where all communications are requested to be addressed.

* The MINING JOURNAL has been duly registered at the Post Office, and the Stamped Edition (6d.) can, therefore, be posted and re-posted, as heretofore, for the period of 15 days, ere always being taken that the stamp is to be plainly seen. The Unstamped Edition (5d.) can be forwarded by post on affixing a postage stamp.

* For the accommodation of our City correspondents, communications or reports may be left at Messrs. HANCOCK and SHARP'S, No. 20, Tokenhouse-yard, where there is a box to receive them; but in all instances it will be preferred that they be sent direct to the office, 26, Fleet-street.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, SEPTEMBER 22, 1855.

The frame of the Deed of Settlement will constitute an important element in the constitution of companies to be formed with limited liability. The Registrar of Joint-Stock Companies had been in the habit of assuming an arbitrary, and far from authorised, power over the frame of the deeds of such companies; but it is now generally understood that he has been directed by the Board of Trade to confine his objections to the consideration, first, whether the object of the company, and, consequently, of the deed, was legal; and, secondly, whether the clauses and provisions introduced into the deed were consistent or not with the 7th and 8th Vic., c. 110, the Joint-Stock Companies Registration Act. The statute for limiting liability will, of course, now impose an additional duty on the Registrar—namely, to see that the deeds regulating companies to be formed with a view to avail themselves of the privilege it confers, are also conformable with the Act.

Great caution must be observed, not only in the structure of the deed, but in the future conduct of companies with limited liability, that there is no departure from the strict province for which they obtained the privilege, or from the line of business for which they are incorporated. Such a departure would be illegal, and would, probably, involve the directors, and, possibly, the shareholders, should they sanction it, in the consequences of being held liable, without any limit, for a contract so made. In a very recent appeal from Lord St. LEONARDS, when Chancellor, the House of Lords, during the last session, while affirming his judgment in the case of the Eastern Counties Railway Company, appellants, *v.* HAWKES, laid down some important propositions of law as affecting railway companies, the principles of which will probably be held also applicable to other joint-stock companies. It was amongst other things decided, that if a company made a contract for the purchase of land, that they were bound by it, although their special powers of taking the land had expired before the completion of their purchase. The safety of mankind in these every-day dealings requires that the doctrine of companies exceeding their powers should be confined within very narrow limits, and must be restrained to clear cases of excess of powers, with the knowledge of the other party either expressed or implied, from the nature of the party treated with, or of the contract entered into. It was accordingly held, that if a company purchased more land than it required, although this might raise a question between the directors and the shareholders, it could not avoid or affect the contract with the seller. A further proposition, perhaps more nearly affecting all joint-stock companies, even those invested with limited liability, was affirmed—namely, that at common law a contract even under the seal of the company could not be enforced, if its effect was to divert the funds of the company to purposes foreign to the avowed object of its constitution. It would seem, therefore, that a company formed with limited liability for one object, cannot legally, and without the risk of forfeiting its privilege, apply its capital or its resources to another and different purpose, at least without new registration.

Many of the apprehensions which were so generally entertained as to the effect of introducing the principle of limited liability, are, we are pleased to perceive, passing away. We have always considered that if the operation of the measure was, on the one hand, to encourage speculative enterprise, it could not fail, on the other, to render caution more circumspect with regard to credit. Unprofitable operations will soon teach those who engage in them that it is far easier to lose their own money than to sport with the funds of others, and the limits of risk will be soon circumscribed within those of responsibility. Of the many projected companies, some are necessarily destined to be still-born; for we believe it will be proved by experience that the new law, instead of engendering a vicious taste, is likely to create an increased degree of wariness in small transactions as well as great. If we are not mistaken, the measure, while it encourages a legitimate system of trade, will be found self-correcting in controlling that of credit. At the commencement sanguine expectations may be in many instances disappointed, but as it must extend the relations of commercial intercourse, it will be found in a great measure to substitute realities for very artificial associations. It is too early yet to speculate upon its effect on existing cost-book mines, the more particularly as the Act of the last session for extending the Stannaries' jurisdiction tends to give validity to such companies; but a short experience of the measure will probably lead to its adoption even within the precincts of the counties, within which that Court is empowered to exercise its authority.

While we thus are indulging in conjecture as to the effect of the new Law of Limited Liability in England, a very useful publication on the operations of the Bourse, or a Manual of the Public Funds, compiled by Mr. A. COURTOIS, has appeared in Paris, and the account given of the Societe generale de Credit mobilier is at this moment of peculiar interest. We have here the details of a very extended joint-stock association (*societe anonyme*), authorised by a decree of the 18th of November, 1852, with a paid-up capital of 60,000,000 francs (2,400,000*l.* sterling), in 120,000 shares of 500 francs each (20*l.*), payable to bearer; the offices of the company being at 15, Place Vendome, Paris, and the authorised duration of the company 99 years. The affairs are managed by a council of fifteen, an executive committee of five administrators, executing the decisions and directions of the council. The general meeting takes place in April, and is composed of 200 of the largest shareholders, every member of which has as many votes, never to exceed five, as he has multiples of forty shares, and every year's accounts are closed at the end of the year.

The operations of the company consist in dealing in all kinds of public securities and those of companies, such as railways, canals, mines, and

other public works, established or to be established. It is authorised to issue its own securities, equal to the amount of the sum invested in purchasing or subscribing for shares. It is empowered to sell or raise money on deposits of shares or other securities, or by exchanging them. It proposes for all loans and sells them, and it also proposes for public works. It lends money on public funds, on the deposit of shares and other securities, and opens current accounts on such deposits; it receives lodgments on similar accounts; it undertakes the management of companies, to pay their dividends, generally transacting all their business, and also acts as agents to parties dealing with them. All other operations are expressly prohibited; and it is distinctly understood that it never deals in time bargains. The net profits are thus appropriated,—5 per cent. as the interest of the capital on the shares subscribed, and 5 per cent. to the reserved fund, which is not to exceed 2,000,000 francs. The surplus belongs one-tenth to the administrators, or managers, and the remaining nine-tenths are distributed among the shareholders. The profits of 1853 allowed a dividend of 13*l.* 40 per cent. on the paid-up capital, and 11*l.* 30 per cent. for the year 1854.

The marked peculiarities of this great association are to be found in its undertaking all the business of all kinds of companies, especially of those who engage in public works, and in its making advances on all kinds of shares. New companies are brought out under its auspices; and its undertaking an agency is considered a passport to success. Railways, foreign as well as French, are worked under its management; and it at present exercises considerable influence over commercial transactions in France. It has entered into a treaty with the Government of Austria for making all the railways in that country; and may be characterised as at present the most active and enterprising association in Europe. Great Britain has long taken the lead amongst nations in commercial advance, but she seems to be outstripped in the spirited progress of the Societe de Credit mobilier; perhaps, however, we may yet see example followed in the foundation of a similar association, with the same objects, in this metropolis.

We have repeatedly, on former occasions, directed attention to the effect and operation of the provisions of the statute generally known as the Truck Act. The third section enacts that the entire amount of wages earned by, or payable to, any artificer in any of the trades therein enumerated, amongst which is that of the raising and working of coal, shall be actually paid to such artificer in the current coin of the realm, and not otherwise; and every payment made to such artificer by his employer of, or in respect of, any such wages by the delivering to him of goods, or otherwise, than in such current coin, is thereby, except in certain specified cases, declared illegal, null, and void. A variety of cases have occurred between employers and their workmen, and the current of decisions became so uniform, that the course of dealing which the Act was intended and framed to prohibit may be said to have, in a great measure, ceased.

A new question has, however, recently arisen, before J. M. HERBERT, Esq., Judge of the Monmouth County Court, in which the principle and prohibitory effect of the Truck Act has been carried much further than heretofore, by a decision that where a tradesman supplies goods on the orders of an employer for payment of wages, in violation, or in evasion of the Truck Act, he cannot recover the amount from the employer by whom the orders were given. The plaintiff, in this instance, was a person of the name of LEWIS, and the action was brought against the defendant PHIPPS, the owner of a colliery, to recover 30*l.* 15*s.* 10*d.*, for goods sold and delivered, a portion of the goods, amounting in value to 4*l.* 10*s.*, having been supplied to the defendant himself. This part of the demand was not disputed; a set-off for 1*l.* 19*s.* 8*d.* was admitted by the plaintiff, but the rest of the claim was for the price of goods delivered to working colliers, in the employment of the defendant, upon orders signed by him. These orders were money orders for different sums, many under a pound, and some exceeding; and it was admitted by the defendant that they were signed by him, and addressed to the plaintiff. It was stated by the defendant that he did not know or care whether the men received goods or cash on the orders, but there seemed no reason to doubt that the plaintiff knew that the orders were given to the men in payment of their wages. It was conceded that the plaintiff had no interest in the colliery, and that the defendant had no interest in the plaintiff's shop, or in the profits arising from the sale of the goods. The men who had received the orders appeared to have been satisfied with the mode of payment, and had never sought to charge the defendant with their wages, on the ground that the mode of payment was contrary to the policy and provisions of the Truck Act. These facts raised the question fairly, and when the case came on for discussion, it was argued for the defendant that he was not liable for the goods so supplied to the men, such a delivery being illegal, and in direct contravention of the enactments of the Truck Act. It is not our province to enquire into the strict morality of such a line of defence, but upon the hearing, the Judge seemed to intimate an opinion that as the plaintiff had no interest in the colliery, or the defendant in the shop, the case was not within the mischief sought to be remedied by the Act; he, however, reserved his opinion, in order to consider more carefully the provisions of the Act, and the law bearing upon them. In delivering his final judgment on a future day, he observed that two questions arose—first, whether this mode of paying the men their wages was prohibited by the Act? and whether, if illegal, the plaintiff who supplied the goods for such a purpose could recover the price of them?

As to the first, it appeared to the Court, upon an elaborate review of the several sections of the Act, that this mode of payment was expressly forbidden, and, therefore, illegal. According to the strict language of the Act, wages must in every instance be paid in the current coin of the realm, except in certain cases, the exceptions being notes of the bank of England, or of any bank duly licensed to issue notes, or checks on a banker, drawn according to law, if the workman freely consents to take his wages in such form. If, then, those money orders do not come within the several modes of payment enumerated in the 8th section of the Act, it was impossible to say that the mode of payment here adopted was not illegal, null, and void. If the plaintiff had paid these orders, which were not negotiable in cash, to the parties named in them, it might probably be considered that the wages had been paid in the current coin of the realm, so as to satisfy the 3d section of the Act. Without deciding whether the defendant had rendered himself liable to any of the penalties imposed by the Act, the question for the Court was—Does the illegality of the transaction prevent the plaintiff from recovering? The Court conceived that it was impossible to doubt that the plaintiff knew that these orders had been given to the men in payment of their wages. It was also free from doubt that the defendant knew that the plaintiff paid in goods, and not in cash, and that the plaintiff also knew that the goods he supplied were for a prohibited purpose, and that he was, therefore, assisting the defendant in the violation of the Act of Parliament; the question then was—could the plaintiff, under such circumstances, recover?

The Court then referred to a number of decided cases which bore upon the point, and from which this established principle of law may be deduced—that whatever is done in direct contravention of an Act of Parliament cannot be made the subject matter of an action at law.

This is the rule which also governs the decisions on insurances on contraband trade, and all that class of cases in which the party is connected with a previous knowledge of the illegality of the transaction. It has, accordingly, been held that money lent for the purpose of paying losses on illegal stockbroking transactions, to which the lender was not even a party, could not be recovered back, for the Court is bound to consider every Act to be unlawful which the law has prohibited; and those who pay, and those who receive are equally guilty. If it be unlawful, therefore, to pay it is quite settled to be equally unlawful to furnish the means for, to pay it is quite settled to be equally established by the highest legal authorities, and the statute having, in this instance, prohibited the payment of the wages of colliers in any other way than in the current coin of the realm, how can a party who assists in the violation of the law, by executing a contract which is intended to carry out an illegal mode of payment, recover on such a contract? It seems to be established beyond doubt that when an Act of Parliament prohibits a thing to be done, an agreement entered into for the purpose of enabling another to do the thing prohibited, or with the knowledge that by so doing, the other is aided in effecting the thing prohibited, cannot be enforced in a court of law.

The Court further observed that, independently of the question of illegality, there would seem a difficulty in suing the defendant upon these money orders as for goods sold and delivered, as the orders were for cash, and such orders cannot be said to be executed by the delivery of the amounts in goods, even of the value, unless, at least, the workmen had their option of receiving cash, and had elected to take goods instead. Being, therefore, of opinion that the payment of the defendant's working colliers by these orders was expressly prohibited by Act of Parliament, and that the plaintiff knew that the goods he supplied to the men were received by them in payment, the judgment of the Court was, that the case came within the au-

authorities referred to, and that the plaintiff could, therefore, only recover the price of the goods supplied to the defendant himself, and not of those supplied, on the defendant's orders, to the men. At the close of the case the Judge also intimated that, under the very strict provisions of the Act of Parliament, the workmen may again sue the defendant for their wages, the goods delivered to them not being any payments whatever to them of the sums due to them for wages.

A number of highly important papers have been read at the meeting of the BRITISH ASSOCIATION, at Glasgow; and in his opening address, the Duke of AROLYL reminded the members "that it was in this Valley of the Clyde that the patient genius of WATT perfected the mechanism which first gave complete control over the powers of steam, and that it was upon those waters, too, that those powers were first applied in a manner which has given new wings to commerce, and is now affecting not less decisively the terrible operations of war."

Amongst the subjects which attracted marked attention was a paper in the department of Mechanical Science, by Mr. W. J. MACQUEEN RANKINE, who presided, introducing to the notice of the association the numerous defects in the new Patent Law, and its administration. During the discussion, the Earl of HARROWBY referred to the report of the Inventors' Funds and Patent Laws Committee, which gave details of the origin and progress of that body, by which it appeared that during the 15 months it had been in existence a sum of 52,911*l.* had been raised. Sir DAVID BREWSTER advocated, with the weight of his eminent authority, the granting of patents gratis. Other members followed, and a general feeling seemed to prevail that there ought not to be any fees charged for inventions of a useful character. In the course of his observations, Sir DAVID further observed, that no invention was strictly fruitless: it showed that some person felt a want, and it attracted the attention of those who might afterwards supply it. He even thought that Government should give a bounty on inventions. Dr. ROBINSON, of Armagh, the celebrated astronomer, characterised the granting of patents gratis as a measure of justice and morality, and also contended for the policy of extending the terms of patents in general. It was acknowledged that, if a right of property is admitted to exist in a member of society, that right was acquired by, and belonged to, the genius of the individual member; and it was termed a foul iniquity to rob the poor man of his genius, which he inherited from Heaven, by the infliction of laws which prevent him from asserting or obtaining his rights, because of his inability to pay the necessary fees required. We observe with pride the liberal view taken by this distinguished association of one of the most galling restrictions on intellect and enterprise; and when we remember that two of its leading members, who were present, are also Cabinet Ministers, it may not, perhaps, be considered vain in us to entertain a hope that our Patent Laws may be speedily remodelled and liberalised.

Amongst the papers submitted to the meeting in the department of Practical Science was an important one on some interesting alloys of iron and aluminium, by Professor F. CRACE-CALVERT, of Manchester. The experiments on the subject had been undertaken with the view of solving one of the great chemical and commercial questions of the day, namely—that of rendering iron less oxidisable when exposed to a damp atmosphere, as it was believed that no kind of coating can be discovered which will resist the constant action and friction of water on iron steamers. Potassium was the most electro-positive metal hitherto known, and, as such, liable to combine with oxygen; and, consequently, alloys of iron and potassium were remarkable for their hardness. Professor CRACE-CALVERT, however, in conjunction with Mr. RICHARD JOHNSON, had succeeded in producing two new alloys, composed of iron, combined with that most valuable and extraordinary metal, lately obtained by M. St. CLAUDE DE VILLE, aluminium, to which we have repeatedly directed attention. These two alloys are composed as follows:—First, 1 equivalent of aluminium, 5 equivalents of iron; second, 2 equivalents of aluminium, 3 equivalents of iron; and the last alloy possessed the useful property of not oxidising when exposed to a damp atmosphere, although it contains 75 per cent. of iron. Messrs. CRACE-CALVERT and JOHNSON hoped to discover, before the association next met, a practical method of preparing this valuable alloy, which would render essential service to arts and manufactures. The following alloys were also described:—One composed of 1 equivalent of aluminium, and 5 equivalents of copper; one of iron and zinc, composed of 1 equivalent of iron, and 12 equivalents of zinc. This last alloy is not only interesting from its extreme hardness, but it is produced at a temperature of about 500°, being formed in a bath of zinc and iron, containing 14 tons of metal, through which iron wire is passed, when coated with zinc, or galvanised. These gentlemen had also prepared several alloys of zinc and copper; copper, zinc, and tin; and copper, zinc, tin, and lead, having definite and equivalent composition; but, as they hoped to enter more fully into the subject next year, they expected that the result of their researches would be that, by preparing commercial alloys according to fixed scientific rules, instead of mere routine, alloys would be produced for commerce far cheaper than those now in use. The action of acids on those alloys was stated to produce this curious fact, that although hydrochloric acid violently affects zinc and tin in alloys containing those metals, with copper they are but very little affected by this powerful acid, and similar results with sulphuric and nitric acids.

A paper, by Mr. W. B. ADAMS, on Artillery and Projectiles, attracted much notice, the object being to establish the importance of the length of the bore in proportion to the diameter, and the propriety of increasing length rather than diameter, with a view to more extended range. Long guns were more difficult of construction than short ones, but the American rifle proved the advantages of length, by which were obtained—first, greater certainty of aim; secondly, greater truth of direction; and thirdly, expansive action of the powder, in addition to the mere explosive force following up the projectile, instead of being wasted in the air. Reasoning by analogy, if the American rifle was right, modern artillery was wrong. It had been shortened for convenience of weight in transport, and to save space on shipboard; and it was sought to compensate the advantages thus lost by increasing the strength, and the quantity of the powder. Mr. ADAMS, amongst other interesting and important recommendations, urged the necessity of using breech-loading guns, and suggested that, in steam-vessels, streams of water could be driven through them, to cool them down when heated. Professor ROBINSON observed, that as yet the exact flight of a projectile, so that it may with more certainty strike the object, could only be attained by making it rotate in its flight. To effect this by any external wings or curved grooves was impossible, as it was well known that there is a certain mass of air carried always along with the shot, which prevents any external spiral from producing the desired effect. With regard to the material of which ordnance should be made, there was great room for investigation; for when a piece of cast-iron is deflected, it never returns precisely to its original position, every deflection, however small, bringing it nearer to its point of fracture. In a 24-pounder, the pressure of explosion is 72 tons on each square inch, which is ten times the force of the tensile resistance of a square inch of metal. This additional strength is, of course, obtained by the greater thickness of the iron forming the breech, and which gradually diminishes towards the muzzle. Every discharge changes the form and structure of the gun, so that there is reason to believe that no cast-iron gun can be expected to stand more than 400 or 500 discharges with spherical shot. The force required to give the rotatory motion to a ball is equal to one-half of the simple projectile force; and hence, while a shot from a plain bore is projected with a velocity of 1500 feet per second, that from a Minie rifle is not more than 900 feet. It was clear that cast-iron was not the best material, as it had not sufficient power to resist repeated percussive action; and, from the statements in the public papers, the attempts to make guns of wrought-iron had failed. The older guns were made of bronze, and it was rather singular that the guns which MAHOMET II. had made of that material were still at the Dardanelles, where they had been used with great effect against our own ships of war, and against the Russians. They had a bore of 3 feet, and were fired with a charge of 200 lbs. of powder, projecting an enormous granite ball, a yard in diameter. If the Turks could formerly cast cannon to stand such a charge, was it not strange that we cannot now surpass them? He then referred to Mr. STIRLING's patent of toughened cast-iron, formed by combining scraps of malleable iron with the pigs when cast, and observed that, although this process had failed when used in ordnance, it was found to answer admirably in ordinary castings, which required strength.

Mr. FAIRBAIRN observed, that most of the iron of which our guns are now made is inferior to that in use some years ago. He had recently been at Woolwich, where some experiments with malleable guns had been made, but they failed; and it is necessary, therefore, that the metal should be solid. When Mr. STIRLING's toughened iron was used, it was found not so good as common iron, and the guns soon burst. All the guns were cast solid, and then bored out; but the unequal cooling of such a

large mass of metal forms a varied granulation, which is not so strong in the centre as at the outside. The Americans still follow the plan which, it was remarked, was adopted more than a century ago in this country, of casting all their guns with a core; they then run a current of cold water down the centre, which cools the metal inside and outside more equally. With regard to the length of guns, Mr. FAIRBAIRN observed that the 13-inch mortars at present in use should be at least 1 foot longer, as 50 lbs. of powder would have more effect, because its force was exerted for a longer time upon the shell, than 60 lbs. with the shorter bore. The form of the mortar was also objectionable, as the thickness of the metal was the same at the muzzle as immediately above the chamber, while it would be better if the thickness were diminished at the muzzle, and increased at the breech. With regard to the durability of guns, he remarked that those of ordinary calibre were supposed to stand from 600 to 700 rounds, but they always gave way at the vent or touchhole, which became conical; but, by putting a tube in the bore, they were found to stand about 700 rounds more. The iron was not certainly of the excellent quality we had formerly: that made by the hot blast answered for ordinary purposes well, but he did not think it best for artillery. The Russian iron ores were chiefly magnetic, and made excellent guns; while almost all the Turkish ordnance was made of gun-metal, a mixture of copper and tin. Mr. MEYER, of Blackwall, is now making a gun of three feet bore, the breach of cast-iron, and the tube of direction of malleable iron, bolted by immense bolts to the breech. There was great difficulty in making guns in parts, as every explosion changes their relative position; he, therefore, preferred casting them perfectly solid. It must also be remembered that the artillery of the present day was very large, and the Government are at present endeavouring to procure some charcoal cast-iron from Nova Scotia or Sweden. In the Bay of Fundy, there were immense supplies of iron and wood, from which a superior metal could be made.

In the Geological Section, a very interesting paper was read by Mr. EVAN HOPKINS, "On the Gold-bearing Rocks of the World, and their Superficial Metallic Productions." According to this eminent authority, the auriferous veins likely to prove very productive are the auriferous pyrites, and the great productions of gold have hitherto been obtained from superficial deposits. The reason why it is generally conceived that quartz is the matrix which produces gold, is that the precious metal, after precipitation, adheres more strongly to quartz than to the other auriferous rocks. Although the quartzose bands produce occasionally large masses of gold, yet the quantity bears but a small proportion to that which is obtained from the ferruginous and talcose slates. Prof. NICHOLL also read a paper "On the Auriferous Quartz Districts of Australia," by Mr. J. A. CAMPBELL, of Glasgow, formerly of that colony. Mr. CAMPBELL believed that the gold fields were inexhaustible, that the finding of gold was only in its infancy, and that when efficient machinery shall be brought to operate on the Australian rocks, there may be then found gold sufficient to liquidate the National Debt. Sir R. L. MURCHISON stated that he had been in communication with the Governor of Australia, and it was undoubted that, although the population had of late largely increased, the produce of gold had decreased. The country was a virgin one, the gold lay in troughs, the riches were on the surface, and would be sooner or later exhausted. When the Spaniards first visited America, gold, collected by the poor people with their sticks out of the gravel of the earth, was found in abundance, covering the palaces of princes, but it was now gone. What had been the case with Mexico and Peru would be yet the case with Australia, but Australia would, no doubt, produce gold for many years to come, and enable Great Britain to found there a magnificent empire.

Long after the system of free trade was considered an acknowledged fact in this country, our neighbours on the opposite side of the Channel, now happily our firm and consistent allies, still encouraged the system of protective duties. Among those who more particularly opposed any modification in the then existing tariff were the ironmasters of France. At this period the cheapest and best rails are made in Wales, at a price varying from 7*l.* 10*s.* to 8*l.* per ton, while French and Prussian are from 14*l.* to 15*l.* per ton, and Austrian are as high as from 19*l.* to 20*l.* per ton, and even then they cannot, owing to the scarcity of the raw material, and cost of production, return a sufficient quantity, the demand always being in excess of supply, while we are enabled to execute orders to almost any extent. In the month of November, 1853, a decree appeared in the *Moniteur*; and, with that enlightened policy which has always since his accession to the throne characterised his Imperial Majesty, NAPOLEON III., he has, in a late decree, reduced the duty on cast-iron, wires, and machinery, so as to make them harmonise with the previous ordinance. The duty on steel is reduced to 50 fr. per 100 kilogrammes, and 70 fr. in the case of steel wire, for musical instruments. The duty on machinery ranges between 15 fr. and 65 fr. when complete, and between 15 fr. and 200 fr. for separate pieces, the duty gradually increasing in the inverse proportion of the weight.

Our space will not allow us to detail the whole of the modifications of the new tariff, but a few instances we will cite—Land steam-engines from 30 fr. to 25 fr.; marine engines, from 45 fr. to 35 fr.; printing presses, from 40 francs to 15 francs: in several instances articles have been reduced as much as 50 per cent.; and the tariff, although not embodying the whole of the doctrines of free trade, is nevertheless a considerable instalment towards it, and every way worthy of the Sovereign who has, by these concessions, inaugurated a great principle.

Although at the first it may seem that some vested interests for a short period will suffer, yet the time is past when it was generally acknowledged that the many should be sacrificed for the benefit of the few. In making these remarks, we shall be told by some carping individuals that monopolies exist in England, and that it would be better we should endeavour to amend these before we talked about our neighbours. We are told we have our water companies, who on payment of a considerable sum of money supply us with a deleterious element; our smelting firms, who coerce the market, &c.; and foreigners, with great justice, point to our municipal abuses, showing how, in contradistinction to their own, these are in general inefficient, and possessing no activity, unless on those occasions where a job is to be perpetrated. This we are not prepared to deny; all these evils have been attacked, and sooner or later must succumb to the power of progress and competition.

The reduction of the French tariff cannot but be considered by all parties as a measure of great importance. Although the French iron manufactures in the Paris Exhibition show a considerable improvement, yet it cannot be denied that they are wanting in the productive power which has so much enhanced the wealth of this country. Their iron and coal beds do not lay in such close proximity to each other as ours do in the British Isles; several railways are still urgently required in France, and the supply for the munitions of war, likewise, creates further demands; although during the past year a protective duty of 25*s.* per ton on pig-iron has been exacted in France, yet a brisk trade has been carried on between the French ports and Scotland. The manufacture of pig-iron in the United Kingdom now amounts to 3,069,838 tons annually, and there is no saying to what the demand may extend.

In the Annex, on a stand 88 feet long by 13 feet broad, specimens are shown from the Scotch, Welsh, Shropshire, and Staffordshire coal fields, the proprietors of which annually expend 20,000,000*l.* and give good wages with employment to 100,000 hands. The principal companies who exhibit iron there for common purposes are the Dowlais, Ebbw Vale, Blaenavon, and Weardale Companies; while for special purposes may be mentioned Messrs. BARROWS and HALL, Butterley Company; W. MILLINGTON and Co.; Lord GRANVILLE, and BAGNALL and SONS. There are, likewise, good specimens from the Tredegar, Derwent, Carnarvon, and Rhymney Companies; so that, on the whole, it may be assumed that the British iron trade is fairly represented at the Paris Exhibition.

From all received accounts, it would appear that several of the products brought forward by our neighbours are superior in quality, but these have been manufactured solely for the purpose, and, therefore, cannot be considered as a criterion of general production. Although practical utility and durability have been generally conceded us, yet hitherto taste and elegance have been awarded to our neighbours.

Although, in some measure, we may not for some time to come dread any formidable rivalry, yet the report of Mr. WASHINGTON SMYTH to the Board of Trade states, that it is highly important that both masters and men should be made aware of the considerable progress of the iron trade in several of the continental states. Since 1851 the blackband ironstone has been discovered in numerous beds in Westphalia; several furnaces are already at work, and about 40 of the largest dimensions are in operation, or are now building. These are illustrated by specimens and plans, which prove that there exists a competition, which can only successfully be met by increased intelligence, constant exertion, and such an economisation of labour, as to supply a better article at a cheaper rate than other countries.

In concluding these digressive remarks, we cannot but reiterate our firm

opinion that this first step is only the precursor of several to come. Already an interchange of hospitalities has taken place between the sovereigns of both countries; the enmity which lasted for nearly eight hundred years has passed away, and an alliance of civilisation and progress against despotism and barbarism has been mutually sealed by the blood of the two nations on the Tauric peninsula. Henceforward the struggle between the two allied nations will be who shall be first in the cause of enlightenment; we have all the solid material, they are enabled to give all the finish to our rough work—we can mutually benefit each other: and when the present struggle is terminated, we fervently hope that the alliance contracted in war will lead to a full appreciation of each others characters, and thus ratify the durability of peace.

Our advertising columns of to-day announce the progress of a measure, of which we heard something as far back as last year, but the delay that has taken place in bringing it forward has naturally given rise to an opinion that the affair was defunct. It appears, however, that such is not the case; and the delay is stated to have arisen from the vexatious obstacles thrown in the way of the measure by certain officials before whom the application for a Royal Charter for the company was last year brought in due course, and which obstacles are only recently overcome. We allude here to the CHARTERED COLONIAL FIRE COMPANY, which, it seems, is now being duly organised, and we presume will, as intimated, shortly come before the public, with the customary details. All that is announced at present is, that "the object of the company is to prepare, upon an extensive scale, by patented machinery, the several valuable fibres which exist in our colonial possessions for various textile purposes, ropes, twine, and paper." The object thus shortly stated would certainly appear to be an important one, and if the company can accomplish it "upon an extensive scale," and produce what they would seem to expect, there can be little doubt of a successful issue to the undertaking. Putting out of view what directly relates to "textile purposes, ropes, and twine," we confess to a little personal feeling in whatever has reference to the production, in quantity or quality, of "paper," in which we can anticipate that many of our contemporaries will concur. And as far as our recollection serves us, some specimens, both of fibre and paper, which came under our notice when the subject was mooted last year, if they can be produced on reasonable terms, promise to be of great and general advantage. We say this irrespective of our present relations with Russia, from whence we have been accustomed to receive our largest supplies of flax and hemp; and if raw materials of equal quality and general value can be obtained from our own colonies—which would really seem to stand in need of something in the shape of succour—a great boon will be conferred upon them, as well as upon the several departments of our home trade, to which the articles in question are represented as being applicable.

An old adage says "honesty among thieves," but it would appear that this proverb is not carried out in every instance, and that there are some parties in the world, even though they are of the legal profession, who disgrace themselves by acts which JACK SHEPPARD, JONATHAN WILD, or other rogues of that stamp, would consider mean and paltry, and totally unworthy of their noble calling. True, they do not commit burglaries, felonies—nay, they do not even descend to larceny. Their knowledge of the law protects them from this; therefore, they rob legitimately—that is to say, although the world in general looks on them as black sheep and immoral scoundrels, they are not legally guilty. On no occasion have they the courage to place themselves within the pale of the law, but by a course of chicanery they endeavour to avoid it, and thus lead a dishonoured and disgraceful existence, not enriching themselves, while they are constantly plundering others. We are led to make these remarks from some circumstances which have lately come under our notice. A gentleman possessed of a little property purchased a mine; some considerable sums of money were laid out upon it, the plant was in good order, &c.: in an evil hour he introduced it on the London market; one of these company makers got his ear, a direction was organised, the proprietor was to receive a certain sum in money, a large proportion of which has not been paid; at the same time, as part of the purchase, it was stipulated he should receive a certain quantity of free shares; the directors and the promoter were likewise to have a portion, the understanding being that none of these should be issued until a dividend of — per cent. was declared on those paid up. Foolishly acting upon these terms, the proprietor ratified the agreement. After some considerable period the mine, owing to mismanagement, was abandoned, and it was then discovered that not only had a number of free shares been put on the market, but where they could not be bona fide sold they had been deposited as security for sums of money. The abstraction of these shares is only a breach of contract, and consequently the parties aggrieved have no redress unless by applying to a court of law, and when they get there they will have the foreknowledge that the individuals they are about to sue are not worth, technically speaking, "powder and shot." Further comments on this case are needless; the facts speak for themselves, and we have no doubt those who are concerned in this peculiar case will understand the allusion.

This, however, is but a type of many. We drew attention some time since where a good English mine had been damaged by mismanagement, chicanery, and, we might almost add, fraud. We have repeatedly shown that a knowledge of mining which is applicable in one country is not always suitable in another. We stated that from want of local knowledge good properties had been damaged, or, if carried on, the shareholders had to expend large sums of money, in order that their agents might acquire the necessary experience—the recent adventures in California and Australia to wit. There will always be found ignorant agents ready to endorse any statement of needy adventurers, provided they impose upon them as men of substance; mines may be reported with a large amount of capital paid up, when it is patent to those who know anything of mining speculation that such is not the case.

To the jobber who traffics in shares, who buys on the chance of the engine being out of order, who by the use of electricity endeavours to influence the market, we have nothing to say; his object is not mining enterprise, but speculative undertakings. Our duty to the general public is plain, and, therefore, very simple; it is that, previously to their embarking in mining, they should first ascertain if there are competent agents on the spot, and any honest committee of management in London. These questions, satisfactorily answered, will tell them whether their capital is to be employed as a speculation or investment.

NEW ERA IN NAUTICAL PROPULSION.—FURNACE BLAST.—Our notice has been directed to an invention, called the "Hirudine Propeller," which aims to supersede the screw, paddle, and all other ship-propelling contrivances yet practically known, and claims to inaugurate a new era in nautical propulsion, paralleled only by the introduction of steam itself; and whilst it can be used either for propelling or steering power, it is also applicable for an economical and powerful furnace blast. As steam, in supplanting manual, horse, and other powers, demanded new agents through which to develop its force, and found them in paddles, screws, &c., so these appliances, after many transitions of form and mutual adaptations, seem at length to have reached their highest practical development; and now in turn the "Hirudine" discovery presents itself in the theatre of mechanical action, and with its inherent *aqua motive*—power of from one hundred to five hundred miles per hour demands only of Science a prime-mover that shall render available this hitherto undreamed-of velocity. We have inspected a model of this extraordinary invention. While the fins and tail of the fish are taken as models in the screw and paddle, the "Hirudine" theory treats them as only auxiliary aids. The "Hirudine" adopts for its model the leech, in simple conformity with true mechanical principles, and may be thus described:—A flat, many-jointed, or elastic band (representing the leech), is extended edgewise to the horizon in a curved undulating line, within a square-sided chamber or tube, formed through the whole length of the vessel below the water line, and open at both ends. The vessel is built without distinction of stem or stern, to move in either direction. The undulatory action is produced by rods passing at regular distances from the band to cranks or eccentrics, set in a spiral series on a shaft, which runs parallel to the tube, and thus at each revolution raises and depresses the band in a continuous wave-like movement throughout its entire length. By this process, the whole column of water in the tube is discharged with great impetus from one of the ends, and the ship is impelled onwards in the opposite direction. It is calculated that in an average sized steamer, with from 12 to 20 revolutions per minute, the water is drawn into, and ejected from, the tube in a constant unbroken column, and at a rate of velocity from 50 to 90 miles an hour, according to the length of the vessel, and this without danger, strain, or even vibration, no portion of the machinery moving at a higher speed than from 100 to 200 ft. per minute. Many advantages are alleged to attend the adoption of the

"Hirudine Propeller," and amongst them the rapidity of passage, resulting from a velocity at least double that of any existing vessels, will economise space, by transferring to cargo much of the large proportion commonly sacrificed to fuel. Another important gain is secured in the greatly diminished friction and wear of machinery, arising from the comparatively leisurely action of the engine. We shall recur again to this interesting subject next week:—the inventor, we may add, is Mr. J. H. Piddock, C.E.

IMPROVEMENT APPLIED TO STEAM.—In the series of experiments which have recently been carried on at New York, under the personal superintendence of Mr. Charles W. Copeland, in relation to the engine which has been designated the "Cloud Engine," the principle of which consists in mixing cold air with ordinary steam, it is assumed that, in addition to the familiar forms of ice, water, and steam, the aqueous element is capable of existing in a state of vesicular vapour, or opaque steam—a form more familiar to the eye than the transparent steam. In the vaporous state, hitherto, steam has never been before suspected of possessing any mechanical power above, or even equal to, that of steam in the transparent state. If a glass bell's-eye were introduced into an ordinary steam-boiler, the steam within will be found to be in a perfectly transparent state, and invisible. On turning a jet, the escaping steam is found to be vaporous, white, and cloud-like. This effect is consequent upon the cooling action of atmospheric air, which mixes with, and apparently condenses it. The conclusion which Mr. Storms has arrived at, is that the volume is increased by this combination to a very considerable extent, under favourable circumstances, even to as much as 75 per cent., by which a corresponding increase is obtained in the efficiency of the engine. If common air be compressed, and introduced, at an ordinary temperature, into a vessel containing steam at the same pressure, the following effects may be anticipated:—On the one hand, a portion of the steam will be condensed, and changed into water, which will diminish the pressure; but, on the other hand, the air will be heated and expanded, and these two effects may have been hitherto supposed very nearly, if not exactly, to balance the other. But the experiments alluded to indicate a decided increase of volume, provided there is a sufficient difference in temperature. If pure transparent steam be mingled with air, previously heated to the same degree, none of this expansion is experienced: hence the question arises, how to compress the air in a pump, and carry it in a cold state into a heated cylinder. Mr. Storms avoids the solution of this difficult problem by allowing the air to mix thoroughly with the steam, at any temperature it may chance to have, cooling it afterwards by expansion—in other words, he mixes hot or warm air with the steam in the steam-chest, and does not expect the mixture to assume the form of the cloud until it commences to expand in the cylinder. The act of expanding cools both steam and air, but in very different proportions. Pure steam of a high pressure (say 60 lbs.) has a temperature of about 310° Fahr.; and if cut off at half-stroke, so as to double its volume by expansion, cools down to about 270°; while air at the same temperature, if expanded to the same extent, cools down to about the freezing point. Thus, the combined fluids may readily be compelled by expansion to assume the form of a cloud, or vesicular vapour, if the presence of air at a different temperature be the only condition necessary. To accomplish this object, and attached to an ordinary horizontal engine, Mr. Storms has, in the instance referred to, placed a double-acting air-pump near the cylinder, and allows it to discharge into the steam-chest just above the valve. As the first portion of the stroke of the pump is spent in simply compressing its contents, it is so timed that it will begin to deliver with the commencement of the stroke of the piston. The pump is enveloped in a jacket of cold water, to keep it cool, and the air, probably, enters the steam-chest at a temperature of from 180° to 250°. A further series of experiments hereon, on a large scale, have lately been tried at the Novelty Works, New York. The engine was first run with steam alone, and then with the cloud combination, the resistance being constant in all cases. The revolutions produced per pound of coal were as follows:—Steam, 107; the cloud combination, 190: showing a great advantage in favour of cloud vapour.

Some years ago the scientific world of London was astonished by the exhibition of a steam-engine on an improved principle, in which, by the substitution of certain preparations instead of water, the working cost was reduced nearly 50 per cent. Whether anything has been done in this country by the public or the Government we have not heard, but we have received authentic information from Marseilles, that the Société de Navigation Mixte have just paid 40 per cent. as the present dividend on their original stock, the market price of these shares (nominally of 500 fr. each, but upon which only 133 fr. have been paid) is 650 fr. The subscription list for an issue of increased capital closed on the 10th inst., and the deposit of 50 fr. per share was paid; they are now quoted at 100 fr. premium. All the vessels of this company are engaged in the transport service of the French Government. It would thus appear that English steam navigation companies are now to be added to railways, and may gain a lesson from the French.

At the present period of activity in the Iron Trade, a notice which appears in another column, respecting the extensive ironworks in the south of Scotland, called the "New Cumnock," formerly the Nithsdale Iron-works, which are to be sold by auction, at Glasgow, on Oct. 3, will be perused by those already engaged, or wishing to engage, with much interest. These works are situated in Ayrshire, the minerals of which, though only recently known to contain the blackband ironstone, are now being largely developed, and that county rather than Lanarkshire (which many consider pretty much exhausted) is now regarded as the source from which the increased demand for Scotch pig-iron is to be supplied. These works, which are erected on the most approved plan, may be purchased, we understand, at such a price as will enable parties to engage on an extensive scale in the iron trade, at a comparatively small outlay of capital; and unless the mineral resources of the immediate district, and the capabilities of the works in other respects, be greatly over-estimated, we can scarcely doubt that a purchaser, with sufficient skill and moderate capital, would find the investment a most profitable one. The mineral fields, leased to the works at moderate royalties, are extensive, and with those not in the immediate neighbourhood there is railway communication, and likewise with the Glasgow and South-Western Railway. The distance from the nearest seaport, with which there is also direct railway communication, is about 30 miles on the west, and on the south 40 miles. It is understood that, when in operation, the works supplied a great deal of iron to the foundries on the Tyne, with which there is direct railway communication.

MINERAL WEALTH OF JAMAICA.—Increasing interest appears to be attached to mining in Jamaica. The *Colonial Standard*, in a leading article, refers to the importance, in a material, if it may be called a national, sense, of the success of mining enterprise in the island as the reason of their making periodical allusion to a source of undeveloped wealth, the importance of which few have merely cursorily considered the subject can rightly appreciate. We, too, have had frequent occasion to refer to the various undertakings which have been formed for working reefs, and the prospects of becoming lucrative investments, while we have just been informed that discoveries of a rather extraordinary character have been made, under singular circumstances, by gentlemen of undoubted integrity, and which will produce considerable interest here, from the richness of the ores, and the extent of the copper country developed. Assays have been made by Messrs. Johnson and Matthey, and Mr. John Mitchell, the particulars of which, with other information, will appear in our next Journal.

SOCIETY OF COACH PROPRIETORS.—The coach masters have shown themselves a not ungrateful body,—the handsome manner in which they have acknowledged the exertions of Mr. J. E. Bradfield proving it. Among other advantages derived by the coaching interest, it was mainly owing to Mr. Bradfield's indefatigable perseverance that the mileage duty on stage carriages was reduced from 1½d. to 1d. The House of Commons having adopted an amendment to the Budget to that effect. The services so faithfully and successfully rendered were rewarded on Thursday, when upwards of 100 of the most respectable and extensive coach proprietors of the kingdom assembled at the Crown and Sceptre, Greenwich, and presented to Mr. Bradfield a handsome chased silver salver, with a bank-note for 1000l. Great as we know Mr. Bradfield's exertions to have been, we think the present will be deemed a very satisfactory return.

Rumour, about a fortnight back, announced the failure of one of our largest firms in the east of London, but arrangements were promptly entered into, in order, if possible, to avoid such an unfavourable occurrence at the present critical period, and which it was expected would have proved successful. The increasing pressure, however, upon the Money Market during the last few weeks has rendered this attempt practically abortive. At the Bankruptcy Court, yesterday, a petition, under the arrangement clauses, was filed in the case of Messrs. C. J. Marc and Co., the iron-shipbuilders of Blackwall. If this measure be supported by the required majority of the creditors, there will be no need for a fiat in bankruptcy, and the business of the house proceed without interruption. A general meeting of creditors will be held for this purpose, and there appears every prospect of a general consent being obtained. The difficulties of the firm are large, and have been of some duration. For nearly a year past rumour has been busy with their names, as having undertaken unprofitable contracts, which were likely, if not certain, sooner or later to involve them in difficulties.

The Great Western of Canada Railway receipts for the six months ending July 31 amounts of 249,693l. currency, leaving 122,920l., after deducting working expenses. Out of this 53,420l. has been paid for interest, 11,250l. for sinking fund on Government loan, and 57,190l. for a dividend at the rate of 8 per cent. per annum. A surplus of 2176l. remains to be carried to the next half-year.

IRON AND COAL TRADES OF YORKSHIRE AND DERBYSHIRE.

(FROM OUR CORRESPONDENT IN CHESTERFIELD.)

SEPT. 21.—Pending the quarterly meetings of the trade, there is not much to report of a definite character with respect to the trade, and particularly in reference to the much-debated question of prices. The opinions of the members of the trade are much divided as to the amount of advance which it would be policy to propose. A rise of 20s. is certain, but 40s. is enveloped in considerable doubt. Materials and labour are high, and an advance is imperatively called for, and has been obtained in many houses for some time past. Plates, sheets, and rails are in great request, but the enquiry for bars is not so good. The reduction of the import duties on iron and steel by the Government of France has given unbounded satisfaction, and it is an important step in the right direction.

The Coal Trade is improving, and as stocks are low, and winter is approaching, we may expect a more active trade than for some time past.

The Steel Trade is said to be improving, though but slowly. The last advices from America are favourable, and the accounts of the harvest were reported to be more favourable than was anticipated. The interminable titles possessed by the mine adventurers in Derbyshire offers such security for the outlay of money over those whose title is merely on lease, and very often such leasehold sets having very heavy royalties, renders the Derbyshire field very desirable to the mining capitalist. The Eyam Mining Company some years ago formed themselves into an extensive mining company, and perceiving in the mineral laws of Derbyshire, including permanent possession of sett, and the certainty of maiden ground after a very limited depth of old workings, circumstances which justified them in giving the High Peak the benefit of their miner-like operations, have at length succeeded in putting the Eyam Mines on a very improved and economical footing; and by a long course of very handsome dividends, have at least done their share towards redeeming the High Peak from the imputation cast upon its remunerative capabilities by those whose operations, had they been conducted on the same principle, might have had the same beneficial termination.

In naming the Eyam Company, we have only an eye to precedence, as being the first in the field of those who have of late years done so much to prove and restore the mines of the Peak, and we must by no means forget to give our meed of praise to those various mining companies from Eyam to Hassip, including the Backdale, the Brightside, the Froggatt Grove, the Peak United, the Sallad Holes, the Norcliff, and also the Wren Park and Calver Sough, all of which are now paying great dividends, excepting two, the Norcliff having but a small outlay to make before reaching the vein out of which the Peak is paying its shareholders 25 per cent.; and the Wren Park has reached the lode, but is suspended at the present moment, waiting for 25 fathoms of pumps, and having cut the vein it is in want of a second lift. The bar-master's books, being a record of dues paid by Calver Sough, to which the Wren Park is united, give an almost incredible amount of ore as raised up to the time of its being suspended, nearly 100 years ago, in consequence of tapping additional water. We believe Mr. Burgoyne, who, along with a few friends, originated the movement that has resulted in the working up of these various mines into a highly remunerative state, is the principal shareholder in the Calver Sough, and has continued to be so from the commencement, his opinion, after investigating every means of information, being such as to induce him to retain his large interest intact, and to advise his fellow-shareholders to do the same. The interest which these various successful adventures has excited is such that we never knew Derbyshire mining more popular with the public than at the present time; and many capitalists in Yorkshire, Lancashire, and other counties, are anxious to obtain possession of suitable sets in the locality in which these mines are situated, but which are now somewhat difficult to obtain. Hundreds of hands are being employed by the various companies, and large sums of money are paid in the form of wages, causing great activity, and we hope benefit, to all interested in them.

THE IRON AND METAL TRADES OF SOUTH STAFFORDSHIRE.

(FROM OUR CORRESPONDENT IN BIRMINGHAM.)

SEPT. 20.—Owing to the fact of being on the eve of the preliminary meeting, at which the prices for the Michaelmas quarter will be finally settled, and the sudden and unexpected fluctuations in the corn market last week, in the face of an admitted average crop, there has been very little disposition to order goods of any description during the last few days.

In the Iron Trade, however, the leading houses can dispense with orders, having already on the books sufficient for the present time, and more than they can conveniently execute. The trade may, therefore, be reported this week in abeyance with reference to prices, which will be speedily terminated by the meeting of next week. The demand for ironstone continues to increase, and the price is, of course, firm, from which we may infer a continuance of that activity which set in at the beginning of this month. There are fresh furnaces being blown in the neighbourhood of Dudley and Wednesbury, and everything indicates a brisk winter's trade. Nor is there any unpleasantness with the men to be apprehended. They are all at work, and likely to continue so, subject to such terms as the masters may propose at quarter day.

In the Coal Trade, there is no change to notice. The men have resumed work, and prices are now steady. Some of the parochial and other contracts have been taken this week at 11s. 6d. and 12s. per ton for best coal, and 6s. for slack. The supply from the new mines at Cannock Chase is very considerable, and the quality superior. It finds a ready market at a distance, and a large quantity is forwarded to the metropolis. From the mines belonging to Lord Ward an increased supply is being obtained, the whole of his lordship's immense mining estates being now energetically worked by his agent, Mr. Smith. Some of the mines suspended some time ago, in connection with the recent failures, have also been set on to work again, and the supply of the district is now very considerable, but still apparently insufficient for the home and foreign markets. The men have accepted the proposed terms, and are satisfied, *pro tem*.

In the Copper Market, there is no change to report, but fears are entertained that the advance of iron will be followed by a rise in copper and other metals.

In the Manufacturing Department, there has been activity observable this week in some branches, particularly in the jewellery trade. Owing, no doubt, to the abundant harvest in Ireland, and the consequent improvement in that country, Irish buyers have been here within the last few days, and purchased with unusual spirit. From Messrs. Roland and Goode, and Messrs. Aston and Son, jewellers, some very large parcels have been sent away to Ireland; and the accounts from that country are encouraging in the highest degree. I am also informed that there is now in the hands of Mr. Betts, and other refiners, large quantities of gold from Australia, and the yield is said to be better than usual. Indeed, the general impression amongst the dealers in the precious metal here is that every arrival from Australia seems to indicate an improvement in the quality of the nuggets.

At the works of Messrs. Fox, Henderson, and Co., Smethwick, there are some large orders on hand for the Government, including necessities for the army in the East. The boiler trade is also exceedingly brisk, and the hands at the works in Wednesbury and West Bromwich are at full work. For cables there is also an immense demand, and some large orders for this article are reported to be in the market for France. Indeed, there is very considerable speculation amongst many leading manufacturers in the heavy iron-works, relative to the effect of the recent alterations in the French tariff, the general impression being that the urgent demands of the war will in France necessitate the removal of restrictions upon many important articles made in this district.

The Glass Trade is dull, with the exception of the stained branch, which is carried on with unusual activity at Messrs. Chance and Co.'s, West Bromwich, and Messrs. Hardman and Co.'s, Great Charles-street, in this town. At the former establishment there are some superior foreigners engaged; at the latter, native talent, working from the designs of Pugin, are employed; and at both houses neither time nor expense are spared in endeavouring to restore the art to its original perfection. There are some admirable specimens at both houses.

Mr. John Britten, of Birmingham, has, during the past week, specified his patent (through Mr. George Shaw) for a new or improved machine for sweeping or cleaning chimneys. This invention consists of sweeping machinery, constructed in the following manner:—At the top of an elastic stem or rod a circular brush is placed, for the purpose of sweeping the chimney-pots; below this circular brush four angular brushes are situated. These angular brushes are fixed on, and supported by, elastic rods, made of steel-wire, or other suitable material, which tend to force the brushes outwards—that is, from the stem or rod of the machine. One pair of

these brushes is placed on a higher level than the other pair, the lower ones working under the upper ones. The brushes are connected together, and to the main stem or rod of the machine, by cords or chains passing through loops, on a tube sliding loosely on the main stem or rod. When the machine is passed up a chimney or flue, the elastic rods carrying the angular brushes force the brushes against the sides of the chimney or flue. When the machine, in passing up a chimney or flue, comes in contact with a fixed obstacle, the cords or chains connecting together the angular brushes are deflected from their horizontal position, and draw up or collapse the brushes, and they are thereby made to pass the fixed obstacle; when the obstacle has been passed, the brushes are brought back to their former position by the before-mentioned elastic rods by which the brushes are supported. The inventor describes a method by which, on turning round the main stem of the machine, the angular brushes are collapsed, or drawn together, on meeting with a fixed obstacle or obstruction in the chimney or flue. In place of angular brushes, the inventor sometimes uses angular scrapers, made of thin sheet-metal, or wire. These angular scrapers are supported upon elastic rods, as before described, with respect to the angular brushes. The scrapers are attached together, and to the stem of the machine, by springs made of vulcanised caoutchouc, or other suitable material. When the scrapers, in passing up a chimney or flue, come in contact with a fixed obstacle, they are deflected from their horizontal position; and when they have passed the obstacle, they are brought back to their former position by the caoutchouc springs. The inventor sometimes introduces the scraping-machine up a chimney or flue for the purpose of loosening the soot from the same, prior to the introduction of the sweeping-machine. In some machines, whether to be used for sweeping or scraping, the inventor places a large guide-roller, and a ball and socket, or other universal joint, about 4 ft. below the body of the machine.

STOCK, MINING, AND RAILWAY SHARES IN IRELAND.

(FROM OUR CORRESPONDENT IN DUBLIN.)

SEPT. 20.—The market during the week had a drooping tendency for both stocks and shares,—in fact, on no security has there been a rise, if we except Waterford and Limerick shares, which were done at 5s. advance. Banks, mines, and railways have all fallen, and business has been of a very limited character. Consols were to-day a shade lower than this day week; while New 3 per Cents. were rather higher. I may here mention one circumstance applicable to the remarks I make below, and it shows that no speculation can be carried on here, from the very limited mode of doing business. Yesterday morning's prices from London came 10s. lower than the previous ones, but recovered the 10s. at 2 o'clock; the consequence was, our prices here were exactly the same as on the previous day. National Bank shares were done 15s. lower to-day, and closed sellers at this price,—this was the only transaction for shares; the following, however, are the latest quotations:—Consols, 89½; New 3 per Cents., 90½; Hibernian Bank, 33½; National Bank, 31; Royal Bank, 19½, ex div. and bonus; City of Dublin Steam, 63½; Grand Canal Company, 41, ex div.; Mining Company of Ireland, 13½; Belfast Junction, 40; Dublin and Wicklow, 6; Great Southern and Western, 50½; Irish South-Eastern, 5½; Killarney Junction, 6½; Midland Great Western, 49; Waterford and Limerick, 19½. A dividend of 6s. per share, and a bonus of 8s., has been declared on Royal Bank shares; this is equal to 10 per cent. per annum.

I feel that I have a right to suggest any ideas tending to benefit any portion of the public, and to advocate reform where I think it is needed. Acting under this impression, I wish to draw attention to the working of the Stock Exchange here, and to the system at present in practice, and I trust that my remarks may be received in the same spirit in which they are penned—namely, that of suggestion rather than dictation. What I am now going to urge is no theory of mine, as it has been more than once brought under the notice of the members of the Exchange, but for some reason has not been adopted. I wish, therefore, to bring the matter again under their consideration, and I feel assured it will receive that attention at their hands which it really demands.

The brokers here meet only once a-day, from half-past 2 till about half-past 3 o'clock, the consequence of which is, that although the half-past 11, half-past 12, and 2 o'clock prices of funds in London are received here by telegraph, the latter are the only ones acted on, and are those which regulate prices here; consequently the early prices are altogether useless, and merely indicate the fluctuations of the market. One inconvenience of this is, that should the early prices show an upward tendency, parties seeking investments cannot take advantage of the disposition thus shown, but must wait till the arrival of the 2 o'clock prices, which may be, in such times as these, 1, or even 2, per cent. higher. It may be urged that if in this instance the buyer would lose, that the seller would gain, and *vice versa*; but as we always follow the London fluctuations, every facility ought to be afforded for free dealing accordingly, and it would preclude the public from telegraphing to a London broker to accomplish business, instead of leaving the commissions here.

Another evil of the present system is, that no stock transaction can be finished here in the one day; the present mode of procedure being to buy or sell one day and to transfer the next. To a person coming from the country this is a serious inconvenience, and it takes two days to complete what might be done in a few hours, because the Bank is closed at 3 o'clock, which is before 'Change is over. To remedy these inconveniences, I would suggest that the brokers should meet at, say, 12 o'clock, and again at 2 o'clock; and if they consider one hour sufficient for all their business, then let them divide that hour between the two meetings. By this arrangement stock could be bought or sold at the 12 o'clock meeting and transferred before 1 o'clock; this would be of the greatest possible advantage to the public; it would, I am sure, materially increase business, and thus benefit the brokers themselves, and it would not cost an additional penny expense. I may ask, can one valid objection be urged against this plan, which works so well in Liverpool and Manchester, where the dealings are only in shares? If not, why could not a trial, at least, be made? The old system could be again adopted, if the new were not found practicable, and equal to the purposes intended.

Having stated thus much, I leave the matter in the hands of the brokers; and I feel certain that, if they carefully consider this subject, they will find that the adoption of a second time of meeting would be of great benefit to both themselves and their clients.

The Bank of England having raised their rate of discount, the Bank of Ireland have followed the example, and have fixed their minimum rate at 5 per cent., although the decrease in their bullion has not been in anything like proportion to that of their circulation. The returns published in the *Dublin Gazette* show that the decrease in the Bank of Ireland circulation has been 105,775l. on the month, and a decrease in bullion of 12,929l., while the circulation of the private banks has increased 36,415l., though there has been a falling off of 12,194l. in the bullion.

An interesting property is announced for sale in the Incumbered Estates Court—that of Sir Thomas Staples, at Stewartstown, near Lough Neagh. The geology of this locality is diversified, and nearly every description of rock will be found in the immediate vicinity. Drumreagh, near Cookstown, is situated in the coal field of that district, and where coal of excellent quality has been recently raised, but the pits have never been skillfully worked. The coal is bituminous, and the beds of considerable thickness, resting on a stratum of fire-clay, averaging from 4 to 5 feet in depth, similar in every respect to the celebrated Stourbridge clay of Staffordshire. The royalties extending over a large area of this coal field belong to Sir Thomas Staples and Mr. E. H. Caulfield, preparatory arrangements for the sale of which are in progress. There are extensive quarries of white limestone on the estate, which are exceedingly valuable, in consequence of the great variety of soils adjoining requiring this description of manure. The extension of the railway from Randalstown to Cookstown, which is distant only four miles from Stewartstown, will materially benefit the neighbourhood.

The glorious news of the fall of Sebastopol was received throughout the length and breadth of Cornwall with an unanimous feeling of joy and exultation. Demonstrations were made in every town, village, and hamlet, and nowhere was the expression of loyalty and gratulation more manifest than in the Cornish mines. At the Great Wheal Vor United, the working miners, headed by their spirited managers, Messrs. H. and E. Cragg, were plainly seen for 20 miles around. Joy and festivity pervaded the neighbourhood of these extensive mines. The health of the Queen, Prince Albert, the Duke of Cornwall, the Royal Family, and our British allies, with other loyal and appropriate toasts, were proposed and responded to, with every feeling of loyalty and joy.

TO THE EDITOR OF THE MINING JOURNAL.

[FROM OUR CORRESPONDENT IN SKIBBEREEN.]

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

WHEAL POOL (SILVER-LEAD AND TIN).—A company has been formed on the Cost-bought Principle for working these mines, which are situate near Helston, Cornwall, in the parish of Wendron, held under lease from the Duchy of Cornwall at 18th dues. The metalliferous character of the district has been proved to a great extent. The Great Wheal Vor Mines are situated on the north, and the lead district 500yd., to be divided into shares of 12. each; deposit, 5s. per share. The sett is very large, being full 500 fms. in length on the north, and of great width. It contains two very important features, from its indications of the lodes, and likewise on the west, of the richness of the tin stream ground. The formation of the tin stream lode is exceedingly favourable for the production of silver-lead ore, being so close traversing on one side, and soft congeal clay on the other. There are other lodes famous, and is a continuation of the Porkellis stream district, known as Loe Valley. The mine is within three miles of a shipping port (Porthleven), with which it is connected by good roads, particulars relating to which are given in the *Mining Journal* of the 5th and 15th inst. There is a large stream of water upon the estate, available for all practical purposes. From the nature of the work, it appears as if it can readily

WEEKLY LIST OF NEW PATENTS.

APPLICATIONS FOR PATENTS, AND PROTECTION ALLOWED.

The receipts on the other lines in the United Kingdom amounted to £239,943, and for the corresponding period of 1854 to £220,494, showing an increase of £19,449. In the case of the Great Northern line, which, as the increase on the metropolitan lines, makes the total income £1,080,000, compared with £1,000,000 in 1854, the increase is £80,000.

THE DURABILITY OF IRON SHIPS. The iron ship *Richard Colden*, which was built 12 years ago, at Liverpool, will repay a visit from any one who is interested in iron ships. She has been 12 years in the East India trade, and has not had the slightest repairs done to her, has never made a drop of water, and will, to all appearance, last as long as the wooden vessel has completely set aside the old notion of a 1, 2, or 12 years' service. *Mail.*

FOREIGN MINES.

The Colonial Gold Company have despatches, from New South Wales, to May 23, and the following extracts detail the operations in the months of March and April:—At LOUISA CREEK, the gold return for March will have shown you the great improvement in yield from the new engine. In April, we have been crushing, after having been at work for some weeks in using the rolls of the 16-in. engine, our present machinery. They answer extremely well, and reduce a large quantity of stuff; but they wear away quickly, and will not last more than six or eight weeks. As we have three pairs of the same size upon the ground, we purposed working the engine day and night. We now think that the quartz is hardly crushed sufficiently fine, and, consequently, that all the gold is not extracted. When the ore is full of arsenical and iron pyrites, the gold is in very minute specks, and difficult to separate; calcining only removes a certain proportion of the above-named metals, and the residuum in the crushed stuff carries away the finer particles of the gold. We have managed to send a Good deal by means of the Jordan's mill, which answers extremely well as amalgamator. The rolls in the mills crush the stuff much finer, and help to bring the quicksilver into connection with the gold. The yield per ton during the last two weeks the engine was crushing amounted to 10 dwts. From our experience of all current expenses, we can positively state that, should the above yield continue, we shall not only cover all our costs, but realise a handsome profit. The yield from the alluvium is most uncertain: last month the returns were promising, but during the early part of this (April), they have been very indifferent. There is no doubt that many parts of these claims are extremely rich, but the gold lies in patches at irregular distances. We believe little dependence can be placed upon alluvial deposits. The ground beneath the vein may be found to be payable, but is still working on the western side of the ridge, and, as we draw near the end of the slope, we may find large nuggets; and, in order to prevent speculation, we have increased the supervision. As our knowledge of these operations increases, we become more sanguine about the results, for we are beginning to see what is necessary for perfecting our methods of working. In the month of April, the yield from the quartz, although small, is very encouraging; there were only two returns, on account of changing the rolls, and the accident to the beam of the steam-engine. The average yield was nearly 7 dwts. to the ton, and, taking the previous month at 8 dwts. to the ton, the gain at the end of the month may be found to be increased. We have an onward step per ton by a better system of amalgamation. There is always a degree of uncertainty connected with the returns from the alluvium: one week we do extremely well, and the next get hardly anything. During the present month (May), we have been doing much better, and hope one of these days to come upon some nuggets. The gold that we have obtained has generally been fine, and a little water-worn. We shall soon be trans-cutting the vein, and then expect to discover some fine lumps." Capt. Paul reports that, at Tamborara, they have continued stamping the quartz from the Royal vein; the quantity crushed to the end of March was nearly 200 tons, out of which they have secured 100 lbs. of gold. The returns are, first, not so satisfactory, and, secondly, the experience shows that they would make a considerable improvement in the future returns, as he has not a doubt that the deficiency in the yield of gold has been caused by a large portion of it being retained in the beds of the stamping-mills.

INCORPORATED BY ROYAL CHARTER (WITH LIMITED LIABILITY).
THE COLONIAL FIBRE COMPANY.
 Capital £100,000, in 5000 shares of £20 each, with power to increase the amount. Deposit, £5 per share.
 OFFICES.—58, FENCHURCH STREET.
 The object of this company is to prepare, upon an extensive scale, by patented process, the several valuable fibres which exist in our Colonial possessions, for various textile purposes, ropes, twine, and paper.
 The Court of Directors, and general measures of the company, are in progress of arrangement, and will be duly announced.

DREWSTEIGTON MINING AND LIMESTONE COMPANY.
 SITUATE IN THE PARISH OF DREWSTEIGTON, IN THE COUNTY OF DEVON.
 Established and conducted on the "COT-BOOK PRINCIPLE."
 In 30,000 shares, of 10s. each.—No further calls to be made, or liabilities incurred.
 A Copy of the Report of the Committee, presented on the 15th inst., may be had at the offices of the company.
 Applications for the remaining shares to be addressed to Mr. JAMES PHILLIPS, managing director, 31, Rush-lane, Cannon-street.

MOIRA COLLIERY, NEAR ASHBY-DE-LA-ZOUCH.
 WANTED at this colliery an AGENT, to take daily charge of the underground department.—Application may be made to Mr. J. T. WOODHOUSE, Overseer, near Ashby-de-la-Zouch. The most unexceptionable testimonials as to character and qualification will be required.

TASSAN LEAD MINE.—ALL PERSONS having CLAIMS
 AGAINST THE TASSAN MINE COMPANY will please forward the same to Mr. THOMAS HAYDON, Savings Bank, Bradford, Yorkshire, in order that they may be examined and (if found correct) discharged.

ENGAIR MWYN MINING COMPANY.—Notice is hereby given, that the FIFTH ORDINARY GENERAL MEETING of the shareholders will be held at the offices of the company, No. 113, Fenchurch-street, London, on Thursday, the 27th day of September, at One o'clock, for the purpose of receiving and adopting, or otherwise, the report of the directors, accounts, and the transaction of the general business of the company.
 And notice is hereby further given, that a SPECIAL GENERAL MEETING will be held after the Ordinary Meeting, for the purpose of rescinding, or otherwise, the resolution passed at the Special General Meeting of 5th December last:—viz., "That no further issue of shares, beyond the aforesaid 1795 re-issued shares, be hereafter made on any terms, unless the consent and authority of a general meeting of shareholders be first had and obtained."
 By order of the Board,
 113, Fenchurch-street, London, Sept. 16, 1855. FREDK. ROBINSON, Sec.

INNEY CONSOLS COPPER AND SILVER-LEAD MINING COMPANY (SOUTH PETHERWIN, CORNWALL).—Notice is hereby given, that the FOURTH HALF-YEARLY GENERAL MEETING of the shareholders in this company will be held at No. 26, Moorgate-street, in the City of London, on Thursday, the 4th day of October next, at One o'clock in the afternoon, on the general business of the company.
 And notice is hereby further given, that at such general meeting aforesaid a resolution will be proposed, declaring any share or shares forfeited, under Art. XI. of the Rules and Regulations of the company, upon which 10s. per share shall not have been paid; and for the purpose of giving full effect and validity to such proposal and resolution, as aforesaid, all calls now in arrear and unpaid are hereby formally demanded.
 THOMAS LEE, Purser.
 Dated this 22nd day of September, 1855, 26, Moorgate-street, London.

TINCROFT MINING COMPANY.—Notice is hereby given, that at a SPECIAL GENERAL MEETING of the shareholders of this company, held this day, the following resolution was unanimously passed:—
 That the scrips numbered 17, 18, 19, 20, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.
 J. B. COLOGAN, Sec.
 3, Queen-street-place, Upper Thames-street, Sept. 20, 1855.

USITANIAN MINING COMPANY.—Notice is hereby given, that at a Board of Directors of this company, held on the 19th inst., a DIVIDEND of TWO SHILLINGS and SIXPENCE per share was declared, PAYABLE on and after the 10th October next. The Transfer-books will be closed from Monday next, the 24th inst., up to the 10th October.
 By order of the Board,
 GEO. H. STANFORTH, Sec.
 5, Queen-street-place, Upper Thames-street, London, Sept. 20, 1855.

BERNHOF MINING COMPANY.—On Monday, the 8th October next, a GENERAL MEETING of the shareholders of this company will be held at its offices at Bernhof, in conformity with the Statutes, for special and important business. To give a right to vote, shares must be deposited on receipt, either at Bernhof, or at the office, 50, Threadneedle-street, at least eight days before the meeting.—Bernhof, Sept. 15, 1855.
 JOHN BROWNE, General Manager.

THE BRITISH SLAG COMPANY.—It is the intention of the Directors to bring this company under the OPERATION of the PROVISIONS of the "LIMITED LIABILITY ACT" as soon as practicable.—3, Cannon-street, City.
THE BRITISH SLAG COMPANY.—NO FURTHER APPLICATIONS FOR SHARES in this company will be RECEIVED after TUESDAY NEXT, the 25th inst.
 3, Cannon-street, London, Sept. 20, 1855. CHARLES F. CAMERON, Sec.

EAST INDIA IRON COMPANY.
 (Incorporated by Royal Charter.)
 THIRD CALL.—Notice is hereby given, that, in pursuance of a resolution of the Court of Directors, the proprietors of Class A, or preference shares, in the East India Iron Company are required to PAY a CALL of ONE POUND per share on each of their respective shares, on or before the 15th day of October next, at the banking house of Messrs. Smith, Payne, and Smiths, 1, Lombard-street, in the City of London.
 Notice is hereby further given, that interest at the rate of 5 per cent. per annum will be charged upon calls remaining unpaid after the day above mentioned; and that if default is made in payment of this call for one calendar month after the 15th day of October next, the shares in respect of which default is made will become liable to forfeiture, under the company's Deed of Settlement.
 8, Austinfriars, London, Sept. 18, 1855. By order, G. E. COOPER, Sec.

THE EAST INDIA COAL COMPANY, "LIMITED."
 Provisionally Registered under the new Limited Liability Act of 1855.
 Capital £150,000, in 15,000 shares of £10 each.
 A deposit of 5s. per share upon allotment.
 The first call of £2 per share to be made one month after the Deed of the Company is ready for signature, of which due notice will be given, and the remaining calls to be made from time to time as the money may be required.
 PROVISIONAL DIRECTORS.
 Capt. L. V. VERNON, R.E., M.P., Ardington House, Wantage, Berks.
 Sir H. T. MADDOCK, M.P. (late Governor of Bengal), 180, South Audley-street.
 GEORGE GRANT, Esq., Bombay Civil Service (late Chairman of the Oriental Bank), Oriental Club.
 JAMES HUME, Esq., of Calcutta, Reform Club, Pall Mall.
 GEORGE SNEY, Esq., Gore-court, near Sittingbourne, Kent.
 A. L. V. de MAGALHAENS, Esq., 75, Mark-lane.
 WM. P. HAYMEN, Esq., Rochester, Kent.
 GEORGE BURGE, Esq., 1, Lansdowne-place, Brunswick-square.
 E. W. MORRIS, Esq., Monument-yard, London-bridge.
 AUDITORS.
 John Noble, Esq., of the firm of Messrs. Noble and Co., Broad-street-buildings.
 H. C. Read, Esq., of the firm of Messrs. Mackay and Read, 9, New Broad-street.
 BANKERS—Messrs. Glyn, Mills, and Co., New Broad-street.
 SECRETARY—Henry Haymen, Esq.
 STANDING COUNSEL—Charles Wordsworth, Esq., 4, Paper-buildings, Temple.
 SOLICITOR—Richard Pratt, Esq., 19, Essex-street, Strand.
 BROKER—Daniel Castello, Esq., 4, Cushion-court, Old Broad-street.
 OFFICES.—132 and 133, GRESHAM HOUSE, OLD BROAD-STREET.
 This company is established with the object of working coals in the valley of the Damoodah, in Bengal, and of supplying the great and rapidly-increasing demand in India for that article.
 Application for shares, in the following form, will be received by the secretary and the brokers of the company:—
 To the Directors of the East India Coal Company, "Limited."
 GENTLEMEN,—I request you will allot me shares in the East India Coal Company upon the terms of your prospectus, and I agree to accept the same, or such lesser number as may be allotted to me, and to pay the deposit thereon at the time and place mentioned in the letter of allotment, and that such deposit may be expended in defraying the preliminary expenses.
 Name
 Address and occupation
 Date
 [For Prospectus, see Mining Journal of September 8.]

EAST INDIA COAL COMPANY.—In consequence of the numerous applications for shares, NONE will be RECEIVED after the 29th inst.
 Sept. 19, 1855. HENRY HAYMAN, Sec.

SALE OF MINING MATERIALS AT THE NORTH BRITAIN BURRA BURRA MINE, NEAR GATEHOUSE-OF-FLEET, KIRKCUDBRIGHTSHIRE.
MR. W. GORDON, Auctioneer, Gatehouse-of-Fleet, begs to intimate that he has received instructions to SELL, BY PUBLIC AUCTION, on the MINE, on Thursday, the 4th day of October next, the following MINING MATERIALS:—viz., A WATER-WHEEL, 33 ft. diameter, and 4 ft. wide, with cast-iron segments and axle, and Memel arms and buckets, with bushes, pedestals, braces, &c., complete; 3 lifts of cast-iron pumps, about 11 fms. each, and 7, 8, and 10 inch bore, with working-bore, doorpieces, windbores, castings, pumping-rods and valves, complete; about 70 fms. of 10 in. capstan-rope, 70 fms. of 10 in. rope, and 100 fms. of 10 in. rope; 24 malleable iron horizontal 1½ in. rods, with joints and side plates; capstan and winch pulleys; iron whips and winze kibbles; double and single iron blocks; bar iron; a quantity of Memel, American pine, and larch timber.
 The whole of the above are new and in good order, never having been used; together with the whole washing apparatus, mining and smith's tools, and a variety of miscellaneous articles commonly used in mining.
 Sale to commence at Eleven o'clock forenoon.
 Gatehouse-of-Fleet, Sept. 18, 1855.

WIRRAL GOLDEN CONSOLS MINE MATERIALS, &c. SECOND AND FINAL SALE.
MR. JOHN BURGESS, Auctioneer, Burncoose, Redruth, WILL SELL, BY AUCTION, on Thursday, the 27th day of September, 1855, at Eleven o'clock in the forenoon, the following MINE MATERIALS, &c.:—
 One 50 in. PUMPING ENGINE, 8 ft. shaft, 9 ft. cylinder, with three boilers; 1 16 in. winch engine, with crusher and raft wheel, complete, and two boilers; 150 fms. 9 in. excellent capstan-rope; 2 capstans; 1 balance-hob, complete; 12 6 in. pumps, with working windbore, and clock rods; 14 ft. 7 in. pump; 1 6 ft. 12 in. windbore; a quantity of cast-iron shaft rods; large iron crane; wrought and cast-iron; winch chain; large beam, scales, and weights; 1 56 lb. brass standard ditto; ladders; timber and plank of various sizes; wheel and hand barrows; burs and bolts; shafts; hatches; ties, with sundry other articles; one mare, 15 hands high; set of cart harness; account-house furniture; timepiece, &c.; 300 fms. 4 in. iron pumps; a 20 ft. water-wheel, 3 ft. breast; 2 plungers; halvans, and muddies.
 For further particulars, apply to Mr. Wynn, on the mine; or to the auctioneer, Burncoose, Redruth.—Dated Sept. 12, 1855.

FOREST OF DEAN, GLOUCESTERSHIRE.
TO CAPITALISTS, COAL AND IRONMASTERS, AND PERSONS FORMING COMPANIES WITH LIMITED RESPONSIBILITY.
 A COLLIERY FOR SALE, containing about 140 acres of unwrought COALS, contiguous to railways communicating with Hereford, Gloucester, Cheltenham, and the Metropolis.
MR. JOHN COOKE WILL SELL, BY AUCTION, at the King's Head Inn, Gloucester, on Saturday, the 29th day of September instant, at two for three o'clock precisely, subject to conditions of sale, which will be produced, and which may be seen in the interim at the solicitors' offices, in Cheltenham.
 All that superior GALE or COAL FIELD, known as the EAST SLADE AND NEWHAM BOTTOM COLLIERY, situated in the township of West Dean, near Ruardean, minutely described in the award of the Forest of Dean Commissioners under the title of "The East Slade Colliery."
 The extent of the mineral field galed to this colliery is shown on the map of the Forest of Dean, at the Gaveler's Office, Coleford. The part unworked is believed to comprise an area of about 140 acres. The gale extends to the Hill Delf vein, which vein varies in thickness from 5 to 6 feet, and yields about one ton and a half of superior coal in every square yard.
 Four pits or shafts are sunk to the coal.
 There is some machinery, which will be sold with the colliery.
 The former owners, after spending many thousands pounds in pits or shafts, buildings, machinery, &c., discontinued these works, from lack of means to carry them on. The shafts and buildings, however, were judiciously placed, and can be made available to the exhaustion of the coal field.
 The well-known increasing demand for Forest coal, with the diminished supply, and the proximity of the East Slade Colliery to the Gloucester and Hereford, and South Wales Railways, render it of great and increasing value. A legitimate opportunity is afforded for the establishment of a company with limited responsibility to purchase and work this colliery.
 It is subject under the grant thereof to a rent to the Crown of 20s. a year, or 2d. per ton for all coal raised, if exceeding 20s. a year.
 The trap of the colliery, and the original gale thereof, from the officers of the Crown to a Free Miner in fee; also, register of the transfer from such miner to a purchaser, and from him to the present vendor in fee, can be seen at the Gaveler's Office, Coleford.
 Further particulars may be known on application to the Auctioneer, Winchcombe-street, or to Messrs. Buss and Co., solicitors, Clarence-street, Cheltenham.

TAMAR SILVER-LEAD MINES, BEERFERIS, DEVON.
VALUABLE MATERIALS AT THE NORTH MINE FOR SALE.
MESSRS. DAVIS, SON, AND VOSPER WILL SELL, BY AUCTION, on Tuesday, the 24th day of October, 1855, at Eleven o'clock in the forenoon, the following SPARE MATERIALS AND MACHINERY, now lying at the NORTH MINE, in Beerferis, comprising:—
 7 9 ft. 17 in. pumps.
 1 9 ft. 17 in. matching.
 4 9 ft. 12 in. pumps.
 1 6 ft. 12 in. pump.
 1 3 ft. 12 in. pump.
 15 9 ft. 11 in. pumps.
 1 6 ft. 11 in. pump.
 1 9 ft. 10 in. pump.
 2 3 ft. 10 in. matchings.
 150 fms. 10 in. capstan-rope.
 1 6 ft. 8 in. pump.
 1 11 ft. 11 in. working.
 1 9 ft. 18 in. working.
 2 11 ft. 10 in. working.
 1 9 ft. 16 in. working.
 1 11 ft. 9 in. working.
 1 6 ft. 12 in. working.
 1 6 ft. 12 in. doirpiece and door.
 1 6 ft. 10 in. doirpiece and door.
 1 6 ft. 10 in. doirpiece and door.
 2 6 ft. 11 in. doirpieces and doors.
 1 6 ft. 8 in. doirpiece and door.
 1 6 ft. 19 in. doirpiece and door.
 1 9 ft. 9 in. windbore.
 1 9 ft. 10 in. windbore.
 2 6 ft. 10 in. windbore.
 1 10 ft. 18 in. plunger-pole, with case, 10 ft. 18 in. box, &c.
 1 10 ft. 10 in. ditto ditto.
 1 11 ft. 8 in. ditto ditto.
 2 11 ft. H-pieces, with doors.
 Also an excellent 18 in. cylinder winch engine, with fly-wheel and cage, complete, and boiler 6 tons.
 The auctioneers beg respectfully to invite a punctual attendance, as they purpose selling the whole in one day; and they also intimate that the above materials are most conveniently situated for transit, being within a few yards of a quay on the margin of the River Tamar, where vessels of large tonnage can load at every tide. Refreshments will be provided.—Tavistock, Sept. 13, 1855.

NEW CUMNOCK IRONWORKS FOR SALE.—There will be EXPOSED FOR SALE, BY PUBLIC ROUP, within the Royal Exchange Sale Rooms, Glasgow, on Wednesday, the 3d day of October next, at Two o'clock afternoon, the extensive and valuable IRONWORKS in Ayrshire, known formerly as the NISSELDALE IRONWORKS, and afterwards as the NEW CUMNOCK IRONWORKS, situated within two miles of the New Cumnock Station of the Glasgow and South-Western Railway, with which they are connected by a branch line, and consisting of THREE BLAST FURNACES, recently erected upon the most improved principles; TWO BLOWING ENGINES, condensing and working expansively, with steam cylinders, 45 in. diameter, and blowing cylinders, 100 in. diameter, 9 ft. stroke, capable of blowing seven furnaces; with WORKSHOPS, COUNTING-HOUSE, DWELLING HOUSES FOR MANAGER AND AGENTS, WORKMEN'S HOUSES, &c. The furnaces and all the buildings are erected on feued ground, of which the proprietors have about 30 acres.
 The LEASES of the MINERAL FIELDS connected with and immediately adjoining the works are extensive, and contain CLAY AND IRONSTONE, several SEAMS of WORKABLE COAL, superior FIRE CLAY, with a BRICK AND TILE WORK, fitted with machinery of the best description; together with railways and tramways intersecting these fields, railway plant, pit engines, and other fittings necessary for carrying on the works on a large scale.
 There are six miles of railway extending from the furnaces to an extensive field of blackband ironstone and coal, lying flat, near the surface, and otherwise well situated for being cheaply worked. The quality and thickness of the ironstone, which has been satisfactorily tested, are very similar to the blackband now used in the neighbouring ironworks at Dalmenilton. Three pits are sunk to the ironstone, and fitted with suitable engines, and all necessary machinery and utensils; and there are about 10,000 tons of ironstone, partly calcined and partly raw, which may be had at a valuation. There is no reason to doubt that arrangements might be made with the proprietors of this and other mineral fields leased by the present company for resuming operations on favourable terms to the lessees or purchasers of these works.
 The works are favourably situated with regard to other coals and ironstone fields in the neighbourhood; and the Glasgow and South-Western Railway affords ready and cheap means of transit to the various shipping ports on the Frith of Clyde, as well as to Glasgow on the north, and England on the south.
 These works present a ready opportunity to parties wishing to engage in the iron trade. If desired, a considerable portion of the purchase money may be allowed to remain on the works.
 For further particulars, application may be made to WALTER MACKENZIE, accountant, 66, St. Vincent-street, Glasgow; JAS. ALLAN, writer, 20, Buchanan-street, Glasgow; HAMILTON ROW, writer, in Cumnock; or to JAMES S. FLEMING, writer, 10, Miller-street, Glasgow, the latter of whom holds the titles of the property.
 Glasgow, Aug. 24, 1855.

FOR SALE, A COLLIERY, producing good STEAM COAL, situate within five miles of a shipping place, with floating accommodation. At this colliery a pair of shafts are sunk, and two seams of coal opened, one 8½ ft., and the other 4½ ft. thick. A country sale is at present being carried on; and the proprietor, being short of means to make about 800 yards of railway, and to obtain additional power for raising the coal, as well as materials for carrying on an extensive trade, is desirous of selling, or of meeting with a party who would assist him. This would suit any person who could himself, or by a company, command about £2000.—Apply, in the first place, to Mr. WILLIAM ROSSER, mineral surveyor, Llanelli, South Wales.

**COAL FIELD IN MID-LOTHIAN.—TO LET, for such number of years as may be agreed on, the COAL FIELD OF INVERKES, seven miles from Edinburgh, containing a large extent of the great seam extending under the farms of Wallyford, Mason's Mains, Barbachlaw, and Crookston, 11 ft. thick in the bore, and of first-rate quality.
 Access to Edinburgh and the neighbouring shipping ports is most convenient by the North British Railway, which intersects the field. The use of machinery capable of commanding the water will be given by the proprietor.—All other particulars will be afforded by JOHN GEDDES, Esq., mining engineer, Edinburgh.
 Edinburgh, Sept. 21, 1855.**

VALUABLE FREEHOLD PROPERTY IN SALFORD.
TO ENGINEERS, IRONFOUNDERS, MACHINE MAKERS, AND OTHERS.
MR. WHEATLEY KIRK is instructed to SELL, BY AUCTION, on Tuesday, the 25th September, 1855, at Six o'clock in the evening, at the house of Mr. Astley, the King's Head Inn, near Trinity Church, Salford, all those valuable FREEHOLD PREMISES, known as the NOAH'S ARK IRONWORKS, Clowes-street, Salford, consisting of 497½ square yards of land, upon which is erected all those substantial brick-built premises, or workshops, forming the above-named works. The buildings are three stories high. There is a well of capital spring water, as well as water from the river. The whole is subject to an annual chief rent of £21. N.B. There is a 12-horse PORTABLE CONDENSING BEAM ENGINE, 18-horse boiler, and a nearly new 18-horse boiler, together with main shafting, steam pipes, &c., which will be SOLD, BY AUCTION, the following day, so that any parties buying the above property will have an opportunity of purchasing the said engine, &c., at the same sale, if they think proper.—Full particulars may be had on application to the auctioneer, at his offices, Cross-street Chambers, Manchester.

TO MANUFACTURERS, CONTRACTORS, MACHINE MAKERS, AND OTHERS.
VALUABLE 12-horse CONDENSING BEAM ENGINE, 18-horse BOILER, SHAFTING, MILL GEARING, STEAM PIPES, &c.
MR. WHEATLEY KIRK is instructed to SELL, BY AUCTION, without reserve, on Wednesday, the 26th September, 1855, commencing at Eleven o'clock a.m., on the premises known as the Noah's Ark Ironworks, Clowes-street, Salford, 12-horse PORTABLE CONDENSING BEAM ENGINE, 18-horse boiler, nearly new, with mountings, &c.; all the valuable main shafting and gearing, wheels, pulleys, wall boxes, pedestals, and brass steps, together with all the steam pipes, &c.—For further particulars, apply to the auctioneer, Cross-street Chambers, Manchester.

HIGHLY-FINISHED FIRST CLASS, EXTRA STRONG, SLIDING AND SURFACING LATHE, with 14 in. centre headstock, with compound slide rest, bed 20 ft. long, and top driving apparatus, complete (1853); also, a WHEEL CUTTING ENGINE, to cut wheels from the smallest dimensions to 5 or 6 ft. diameter—a splendid tool, by Buckton, Leeds (1863).—Apply to WHEATLEY KIRK, engineer and auctioneer, Cross-street Chambers, Manchester, and Bonded Wharf,

METROPOLITAN SCHOOL OF SCIENCE, APPLIED TO MINING AND THE ARTS.
MUSEUM OF PRACTICAL GEOLOGY.
DIRECTOR: SIR ROBERT MURPHY, F.R.S., &c.
During the Session 1855-56, which commences on the 1st October, the following COURSES OF LECTURES AND PRACTICAL DEMONSTRATIONS will be given:—
1. CHEMISTRY..... By A. W. HOFMANN, Ph.D., F.R.S.
2. METALLURGY..... By JOHN PRYCE, M.D., F.R.S.
3. NATURAL HISTORY..... By T. H. HUXLEY, F.R.S.
4. MINING..... By W. W. SMYTH, M.A.
5. GEOLOGY..... By A. C. RAMSAY, F.R.S.
6. APPLIED MECHANICS..... By ROBERT WILLIS, M.A., F.R.S.
7. PHYSICS..... By G. G. STOKES, M.A., F.R.S.
INSTRUCTION IN MECHANICAL DRAWING, by Mr. BISSON.
The fee for matriculated students (exclusive of the laboratory) is £30 for two years, in one payment, or two annual payments of £20.
Students are received in the Royal College of Chemistry (the laboratory of the school), under the direction of Dr. Hofmann, at a fee of £10 for the term of three months. Tickets to the Queen's or the East India Company's service, acting mining agents and managers, may obtain them at half the usual charge.
Certified schoolmasters, pupil teachers, and others engaged in education, are admitted to the lectures at reduced fees.
H.R.H. the Prince of Wales has granted two Exhibitions, and others have also been established.
For a prospectus and information, apply at the Museum of Practical Geology, Trevelyan Street, London.

MINING SCHOOL.—CANDIDATES FOR ADMISSION to the MINING SCHOOL must present themselves for EXAMINATION at the METROPOLITAN INSTITUTION, TRURO, on Wednesday, the 26th inst., at Noon. Any information may be obtained on application to W. H. BOND, Hon. Sec., Truro, Sept. 22, 1855.

MERCANTILE, MINING, & AGRICULTURAL LABORATORY.
W. CROWDER, F.R.S., CONSULTING AND ANALYTICAL CHEMIST, 104, SIDE, NEWCASTLE-ON-TYNE.
Late Lecturer on Chemistry in the Newcastle College of Medicine, and formerly Assistant in the Laboratory of the Highland and Agricultural Society.
Mr. W. Crowder begs to inform such persons as are connected with Mercantile, Mining, or Agricultural pursuits, that he will be happy to perform ANALYSES and ASSAYS of every description, and to be CONSULTED upon subjects pertaining to SCIENTIFIC CHEMISTRY. A limited number of PRIVATE PUPILS are admitted to the laboratory on the following terms:—
Free for 12 months' course of instruction, in one payment in advance..... £4 0 0
Free for 3 months, payment in advance..... 0 0 0

MINING INVESTMENT.—WEST ABERFROWD.—TO BE SOLD. A very valuable MINE, situated in the heart of the best mining district in Scotland. A shallow adit level has been extended for many fathoms, in the bottom of which there is a good course of ore now to be seen, and some tons of ore on the surface broken therefrom. A deep adit level has been commenced, and driven on the course of the lode for 20 fms., the lode yielding lead ore. To continue the level to the course of lode discovered in the shallow adit level was the object of the present company; but a great portion of the mine being held by working miners in the adjacent neighbourhood, whose means are not sufficient to carry on the trial with spirit, is the only cause for parting with the property. To inspect, and for further particulars, apply to the agent, PHILIP NICOLL, Glasgow, Aberystwith.
P.S. There is every facility for the working of water machinery, carriage light, and does moderate.—March 5, 1855.

COLLIERY AND WORKS IN SOUTH WALES.—TO BE SOLD. BY PRIVATE TREATY, THE PENCLAWDD COLLIERY, on the Barry Road, opposite to the station, and two miles from the south Wales Railway. The mine is worked for long terms, at low royalties, and includes several hundred acres. The colliery is completely won by a pit of 80 fms., with pumping engine of 10 h.p., cylinder, more than sufficient to command any future increase of water from the unworked district, having a range of two miles upon four workable veins. A short incline connects the colliery with the shipping wharves, where the only port is in the river. The colliery is well adapted for the formation of a branch to the South Wales Railway.
The proprietor will either sell the whole property, or will retain the lands, and grant a lease of the pit and the necessary erections and shipping wharves.—For particulars apply, by letter, to J. BENSON, Swansea.

MANUFACTORY OF GUNPOWDER.—TO BE LET. A POWDER MILL, situated at TAQUEMONT, in Dutch Limburg, close to the station of the railway from Maastricht to Aix-la-Chapelle and the Meuse. The establishment consists of two mills, containing four powerful crushers, bags for mixing, powder, smoothing stones, and an apparatus for manufacturing round hunting powder after the Swiss process. The mills are kept in motion by two hydraulic wheels on the River Genie, the water of which has a rapid fall, never dries up, nor freezes in winter. The establishment contains the necessary offices for the manager, for receiving orders, wood-charring, granulating and sorting the gunpowder, drying-rooms, cart-roads, workshops for carpenters, coopers, and space for the raw materials. The whole of these buildings are spread over an area of about 4 acres, and perfectly separated from each other.
The vicinity of the establishment is amply provided with wood, yielding good charcoal, as well as with willows, hazel trees, and spindle-tree wood. It has been carried on with skilled workmen for the last 12 years, under a manager who is thoroughly acquainted with the art of making gunpowder.—For further particulars, apply (pre-paid) to Mr. C. B. LOISEL, proprietor, at Taquemont, near Maastricht.

PATENT SAFETY FUSE.—THE GREAT EXHIBITION PRIZE MEDAL WAS AWARDED TO THE MANUFACTURERS OF THE ORIGINAL SAFETY FUSE, RICKFORD, SMITH, DAVEY, and PRYOR, who beg to inform Merchants, Mine Agents, Railway Contractors, and all persons engaged in Mining operations, that for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE has now a thread wrought into its centre, which, being patent right, infallibly distinguishes it from all imitations, and ensures the continuity of the gunpowder.
This Fuse is protected by a Second Patent, is manufactured by greatly improved machinery, and may be had of any length and size, and adapted to every climate.
Address:—RICKFORD, SMITH, DAVEY, and PRYOR, Fackingham, Cornwall.

SAFETY FUSE.—Messrs. WILLIAM BRUNTON and CO., PEN-ALLICK, near REDRUTH, CORNWALL, MANUFACTURERS OF FUSE, of every size and length, as exhibited in the Great Exhibition of 1854, and applied to the Royal Arsenal at Woolwich, the Arctic Expedition, and every part of the globe. Messrs. BRUNTON & CO. are at all times PREPARED TO EXECUTE, BY LIMITED QUANTITIES, or SUPPLYING FUSE direct from their own MANUFACTORY, upon terms that it will prove equal to, if not better, than any to be procured elsewhere.

CANDLES AND TALLOW FOR MINES.—PALMER and CO.'S PATENT TALLOW CANDLES, and PATENT OPERATIVE CANDLES, neither of which require snuffing, at prices below those of all other mining candles.
Wholesale agent, JOSEPH DUNSTON, Truro, by whom a stock is kept on hand, and the ordinary mining candle. Delivered free of carriage when orders for 100 candles and upwards are given.—Lemon Yard, Truro, May 23, 1855.

MINING.—PATENT PUMPING AND WINDING STEAM-ENGINES. MADE PORTABLE, AND MOUNTED ON BROAD WAGON WHEELS, TO BE LET ON HIRE, OR FOR SALE.—All interested in mining are invited to INSPECT MEDWIN and HALL'S PATENT PORTABLE STEAM-ENGINES. (See the Reports of this Journal.)
Several of these engines are in stock, and ready for immediate delivery, of 8, 10, 12, 14, 16, 20, 25, and 40-horse power, adapted for mining and other purposes. They possess advantages of strength and simplicity over all other portable engines; and may be seen at Messrs. MEDWIN, HALL, and CO.'S, sole patentees and manufacturers, 10, Blackfriars-road, London.

PUMPING MACHINERY, FOR AUSTRALIA, INDIA, CEYLON, SOUTH AMERICA, MEXICO, THE CONTINENT, &c.—All persons desirous of raising large or small quantities of WATER, for works of drainage or irrigation, docks, canals, coffer dams, water-works, &c., by horse, wind, or steam, should SEE GWYNNE and CO.'S PATENT MACHINERY for these purposes. It is the most economical, efficient, simple, and durable, ever brought before the public. HYDRAULIC RAMS, WATER-WHEELS, STEAM-ENGINES (portable and fixed), with every information, obtained by applying to GWYNNE and CO., hydraulic and mechanical engineers, Essex Wharf, Essex-street, Strand, London.

NEW PATENT ACT, 1852.—MR. CAMPBELL, having advocated Patent Law Reform before the Government and Legislature, and in the pages of THE MINING JOURNAL, &c., is now READY TO ADVISE AND ASSIST INVENTORS in OBTAINING PATENTS, &c., under the NEW ACT.
The Circular of Information, gratis, on application to the Patent Office and De-
pot, Registry, 156, Strand.

PURIFICATION OF GAS.—THIS PROCESS IS APPROVED and ADOPTED by some of the most intelligent GAS ENGINEERS in the Kingdom, and their opinions are fully borne out by the investigations of Dr. Letheby, a member of the scientific authorities. It will, no doubt, be employed in nearly every gas-works; and will lead to an enlarged consumption of gas in private houses, from which it is now excluded by a fear of its impurity.—Terms of license, &c., may be obtained of Messrs. HOLMES BROTHERS, Huddersfield, agents to the patenting County Gas Co., &c.

ENGINEERS, MECHANISTS, ARTISTS, BUILDERS, CHEMISTS, MUSICIANS, and all SCIENTIFIC PROFESSIONALS and AMATEURS, will receive the ROYAL POLYTECHNIC every Novelty, in Peace or War, likely to interest Inventors, Capitalists, or Students. Models on the largest scale; LECTURES by the ablest professors; EXHIBITIONS constantly varied, and most instructive and interesting; Open 12 hours daily.—Admission to the whole, ONE SHILLING. Liberal arrangements entered into with conductors of Railway Excursions, heads of Schools, Universities, and large employers of Skilled Labour; and Special Illustrations given for the benefit of the Poor. Inventors and Manufacturers of Unique Articles of Utility are invited to judge for themselves of the advantage of having their Designs and Patents displayed at the POLYTECHNIC, the most frequented and highly patronized exhibition of the kind in Europe, and one invariably visited by all persons and societies arriving in London.—Particulars on application, personally or by letter, to J. H. FARRER, Esq., Managing Director.

RAILWAY WAGONS.—WM. A. ADAMS AND CO., MIDLAND WORKS, BIRMINGHAM.
BROAD AND NARROW GAUGE COAL AND IRONSTONE WAGONS.
IN STOCK—FOR SALE OR HIRE.

RAILWAY WHEEL AND AXLE WORKS.
GEORGE WORSDELL AND CO., WARRINGTON, MANUFACTURERS OF EVERY DESCRIPTION OF HAMMERED IRON, TYRES, AXLES, &c.

MR. J. H. SWAN, CONTRACTOR FOR, AND INSPECTOR OF, ENGINE, MACHINERY, AND FOUNDRY WORK.
63, ST. VINCENT STREET, GLASGOW.
PIPES AND OTHER CASTINGS, ENGINES, &c., PURCHASED AND SOLD ON COMMISSION.

THE PERMANENT WAY COMPANY, holding a large number of PATENTS relating to the CONSTRUCTION and REPAIRATION of the PERMANENT WAY OF RAILWAYS, are at all times ready to communicate on the subject, and to GRANT LICENCES for their USE.
From the facilities thus afforded to companies to negotiate for a number of inventions, much trouble and chance of litigation is avoided. The company undertake arrangements for bringing new inventions on the subject before the public, upon terms advantageous to the proprietors of patents.
Applications may be made to CHARLES MAY, F.R.S., the manager, or to WILLIAM HOWDEN, Sec., 26, Great George-street, Westminster.

MUNTZ'S PATENT SOLID ROLLED BRASS TUBES.
These are the only BRASS TUBES that are MALLEABLE when RED HOT, and are CHEAPER and MORE DURABLE than any others. They continue to be extensively used in the steam boilers of the navy, also on several of the English and foreign railways, and are the only brass tubes used by the London and North-Western Railway Company.
G. F. Muntz's Patent Metal Company, having completed extensive works to meet the increasing demand, are now able to execute orders promptly.
French Wallis, near Birmingham, Aug. 24, 1855.

TO IRONMASTERS, MERCHANTS, CONTRACTORS, FOUNDRERS, &c.—Messrs. DAUNT and MOFFAT, METAL BROKERS, 59, ST. VINCENT STREET, GLASGOW, OFFER THEIR SERVICES for the PURCHASE and SALE of PIG and MANUFACTURED IRON.
All orders carefully executed, and prompt shipments made.

TO ENGINEERS, MINING COMPANIES, AND ALL PARTIES USING STEAM POWER.—LOVELOCK and FORSTER'S PATENT FLEXIBLE STEAM PACKING will be found CHEAPER and more ECONOMICAL than packing of any other description. Samples and testimonials on application.
Warehouse, 7, Dowgate-hill, Cannon-street.

TO ENGINEERS, MILLWRIGHTS, SHIPBUILDERS, &c.—W. BLACKETT, ENGINEER, CROSBY HALL CHAMBERS, BISHOPSGATE STREET, LONDON, has FOR SALE, and READY FOR DELIVERY, various ENGINEERING TOOLS, comprising large and small drilling and boring machines, self-acting screw-cutting lathes, hand lathes, planed iron beds and compound slide rests, shaping, planing, punching, and shearing machines, and other useful tools. Particulars forwarded on application.

TO ENGINEERS, MACHINE MAKERS, AND OTHERS.—CHAS. MACINTOSH and CO., PATENTERS and MANUFACTURERS of the VULCANISED INDIA-RUBBER, all degrees of elasticity, recommend this material as capable of SUSTAINING the ACTION of HOT or COLD WATER, GAS, STEAM, ACIDS, and GREASE. It is used extensively for valves in marine and land engines, railway buffers and springs, washers for pipe joints, hose, and tubing, also for gas holders, acid pumps, alkali cisterns, &c. Articles, moulded or otherwise, made to any size or figure.—Address, 3, Cannon-street West, London; and Cambridge-street, Manchester.

TO ARCHITECTS, SLATE MERCHANTS, BUILDERS, AND OTHERS.—THE DIRECTORS of the MACHINERY and SLATE COMPANY having completed their arrangements for the REMOVAL of their SHIPPING PORT to COXWAY, for the convenience of vessels unable to lower their masts to pass the tubular bridge, are now PREPARED TO RECEIVE ORDERS for their justly celebrated SLABS and SLATES, from the Ffestiniog vein, which for beauty of colour and durability are unequalled.
The slabs have been largely used in the construction of houses for Australia; and, from the facility with which they are erected and removed, are well adapted for movable huts for men and horses at the proposed camps in England and Ireland.
All applications to be addressed to Mr. T. H. WHEELER, the resident director, at the company's offices, Conway, North Wales.

STATIONARY STEAM-ENGINES OF THE BEST QUALITY.
from 1 to 50-horse power, fitted with VARIABLE EXPANSION GEAR. These engines, which have been designed to combine great simplicity of parts with the utmost economy of action, are supplied with or without boilers, at the lowest possible rates; and erected, if required, in any part of the kingdom. General boiler and tank work carefully executed upon advantageous terms.—Apply to Messrs. WILLIAM YOUNG and CO., engineers, Barnstaple.

IMPORTANT TO LEAD SMELTERS.—THE INVENTOR IS PREPARED TO CONSTRUCT, upon liberal terms, a DOUBLE REVERBERATORY FURNACE, capable of making a SAVING of 50 per cent. FUEL over that of the best constructed furnaces in Europe; at the same time guaranteeing the general loss in smelting not to exceed 5 per cent.
The inventor, after 20 years' experience, both in England and various parts of the Continent, has discovered the method, in the regular course of smelting, and without any extra cost, of separating antimony from a certain class of silvery-lead ore, thereby rendering the lead free of all impurities, and, at the same time, the antimony in a marketable state.—All applications to be addressed to the inventor, Mr. ALFRED JESSON, Esq., near Eakworth, Derbyshire. One of the furnaces will be at work by the end of the present month. A descriptive notice of the invention appeared in the Mining Journal of July 14.

DR. COLLYER'S AUSTRALIAN GOLD, TIN, AND COPPER MACHINERY.—DR. COLLYER informs those who are interested in mining property that he has APPOINTED RANSOMES and SIMS SOLE MANUFACTURERS in ENGLAND of his PATENT MACHINERY; and that they are prepared to SUPPLY the same on the following cash terms:—
Large size crusher, with shafts, capable of reducing from 10 to 12 tons of ore per day. Power required (say) eight horses..... £120 0 0
Small size crusher, 3 to 5 tons per day. Power required (say) four horses..... 90 0 0
Gold separator, capable of washing alluvial earth, from 10 to 12 tons per day. Hand-power..... 50 0 0
Extra shafts, large size, £20; small ditto £10 each.—capable of reducing 1000 tons. (No part of this machinery exceeds 15 cwt.)
N.B. These machines are particularly adapted for the reduction of tin ores.—For further particulars, address RANSOMES and SIMS, Ipswich.

HALSEY'S PATENT CRUSHER AND AMALGAMATOR.
This machine is NOW IN OPERATION at ESSEX WHARF, ESSEX STREET, STRAND. GOLD ORES carefully TESTED on the following terms, including the use and distillation of mercury:—
Samples not exceeding 5 cwt..... £1 10 0
" " " 10 cwt..... 2 0 0
" " " 1 ton..... 2 15 0
" " " 2 tons..... 3 15 0
" " " 3 tons..... 4 10 0
" " " 4 tons..... 5 0 0
Larger quantities by special agreement. Price of the machine complete, £200.

HENRY J. MORTON AND CO.'S (No. 2, BASINGHALL BUILDINGS, LEEDS) PATENT WIRE ROPES, for the use of MINES, COLLIERIES, RAILWAYS, &c.; one-half the weight of hemp rope, and one-third the cost; one-third the weight of chains, and one-half the cost—in all deep mines these advantages are self-evident. References to most of the principal colliery owners in the kingdom.
GALVANISED SIGNAL CORDS and KNOCKER LINES; will not rust or corrode, and not affected by the copper water in mines. Very strong, and not liable to break. Prices from 15s. per 100 yards.

PATENT ASPHALTED ROOFING FELTS, 1d. per foot.
DRY HAIR BOILER FELTS, TO SAVE COAL.
PATENT BOILER COMPOUND, for bad water.
FAIRBANK'S WEIGHING MACHINES, of all sizes.
GALVANISED IRON ROOFING AND SPOUTING.
MILNERS' FIRE-PROOF SAFES.

STOCK OF MINING and RAILWAY STORES in Liverpool and London:—viz., OILS, GREASES, COTTON WASTE, SPUN YARN, WHITE LEAD, VARNISHES, &c.; and at very low prices.—Address, 2, Basinghall-buildings, Leeds.
SOLE AGENTS for Prof. GLUKMAN'S ELECTRIC SIGNAL from RAILWAY GUARD to ENGINE DRIVER, and also for the use of COLLIERIES and MINES.
N.B. Illustrated price list on application.

MORTON'S PATENT WIRE ROPES.—HENRY J. MORTON AND CO., GALVANISED IRON ROOFING AND SPOUTING WORKS, 2, BASINGHALL BUILDINGS, LEEDS.
IMPROVED PATENT WIRE ROPES, for MINES, COLLIERIES, RAILWAYS, &c. References to all the large colliery owners in the kingdom. One-half the cost of hemp or chain, more durable, and ONE-THIRD THE WEIGHT OF CHAIN—very important advantages for deep mines.

FAIRBANK'S IMPROVED PATENT WEIGHING MACHINES, for the use of IRONWORKS, COLLIERIES, RAILWAYS, WAREHOUSES, STORES, &c. The most ACCURATE MACHINES in use, and the cheapest.
MACHINES of all sizes, from 1 cwt. to 30 tons, for RAILWAY WAGONS, CARTS, or WAGONS.—For prices and all other information, apply to HENRY J. MORTON and Co., Galvanised Ironworks, 2, Basinghall-buildings, Leeds.
Asphalted Roofing Felt, Boiler Felt, Galvanised Iron, &c., in Stock.

CHEAP, LIGHT, AND DURABLE ROOFING, ONE PENNY PER SQUARE FOOT.—HENRY J. MORTON AND CO., 2, BASINGHALL BUILDINGS, LEEDS. PATENT ASPHALTED ROOFING FELTS, for roofing sheds, contractors' cottages, ore-dressing sheds, brick and tile sheds, and all agricultural purposes. One penny per square foot. The cheapest roofing manufactured. Stocks kept in London, Leeds, and Bristol. DRY HAIR BOILER FELTS, for saving fuel.
H. J. MORTON AND CO., 2, Basinghall-buildings, Leeds.

212° MILNERS' HOLDFAST AND FIRE-RESISTING SAFES (non-conducting and vapourising), with all their improvements, under their Quadruple Patents of 1849-51-54 and 1855, including their GUNPOWDER PROOF SOLID LOCK AND DOOR (without which no safe is secure). THE STRONGEST, BEST, AND CHEAPEST SAFEGUARDS EXTANT.
MILNERS' PHOENIX (212°) SAFE WORKS, LIVERPOOL, the most complete and extensive in the world. Show Rooms, 6 and 8, Lord-street, Liverpool. London Depot, 47, Moorgate-street, City. Circulars free by post.

LEE STEVENS'S PATENT FURNACES comprise an established SYSTEM of SMOKE PREVENTION and ECONOMY OF FUEL, for all manufacturing purposes, from the smallest pan to the largest copper or boiler; and is remarkable for simplicity, cheapness, and facility of adaptation. Average saving of fuel, 20 per cent. Drawings of furnaces in successful operation, testimonials, official reports, &c., may be seen at 1, Fish-street-hill, City.

OVERLAND ROUTE.—STEAM TO INDIA AND CHINA, &c.
VIA EGYPT.—THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY BOOK PASSENGERS and RECEIVE GOODS and PARCELS for the MEDITERRANEAN, EGYPT, ADEN, BOMBAY, CEYLON, MADRAS, and CALCUTTA, by their mail packets leaving Southampton on the 4th and 20th of every month; and for CHINA and the STRAITS, by those of the 4th of the month.
For further particulars, apply at the company's offices, No. 122, Leadenhall-street, London; and Oriental-place, Southampton.

PATENT IMPROVED WIRE ROPE WORKS, MILLWALL, POPLAR.—A. J. HUTCHINGS, and CO., Sole Makers to the Lords of the Admiralty.—ROUND and FLAT ROPES, of every description, suitable for mining operations or other purposes. GALVANIZED or UNGALVANIZED, MANUFACTURED upon the IMPROVED PRINCIPLE, ensuring great pliability and durability. The superiority of these ropes over hempen ones, in point of strength, lightness, durability, and cost, is admitted by all who have tried them.
GUIDE ROPES, SIGNAL CORD, LIGHTNING CONDUCTORS, &c.

IMPROVED PATENT WIRE ROPE.—MR. ANDREW SMITH, the ORIGINAL INVENTOR of WIRE ROPE, LIGHTNING CONDUCTORS, and SUBMARINE TELEGRAPHS, solicits the attention of the public to his IMPROVED PATENT MANUFACTURE, as the best and cheapest, having obtained his sixth patent since 1835.—Office, 69, Princes-street, Leicester-square, London.

ASSAYING.—CITY SCHOOL OF CHEMISTRY AND ASSAY OFFICE, DUNNING'S ALLEY, BISHOPSGATE STREET WITHOUT.
Conducted by JOHN MITCHELL, F.R.S., Author of Manual of Practical Assaying, Manual of Agricultural Analysis, Treatise on the Adulteration of Food, Metallurgical Papers, &c. ASSAYS and ANALYSES of MINERALS, METALS, and every manufacturing product.
SPECIAL INSTRUCTION in ASSAYING and CHEMISTRY for gentlemen intending to proceed to the colonies.

IMPROVED LIFTING JACKS.
MANUFACTURED BY W. AND J. GALLOWAY, PATENT RIVET WORKS, MANCHESTER.
The attention of parties who employ Lifting Jacks, is respectfully requested to the superiority of those annexed, over those hitherto in use.

THE AMERICAN MINING CHRONICLE, AND IRON MANUFACTURERS' JOURNAL.
Commenced its Fifth Volume, 1st July, 1855.
The CHRONICLE contains full and correct particulars of the progress and prospects of every Mining and Incorporated Manufacturing Association in the United States of America, the British Provinces, Mexico, and South America, furnished us by our own correspondents in the various sections; Reports of Proceedings of Mining Companies, &c.; Notices of New Discoveries in all branches of Metal Manufactures, and in all applications of Science to Mining; the fullest and most authentic Reports of the state of all the Foreign and Home Metal Markets; Prices Current of Metals; Prices and Fluctuations of the Mining Stock and Share Markets, in New York, Boston, Philadelphia, and the other cities in the States where mining stocks are constantly or occasionally dealt in, regularly sent us by reliable correspondents.
The contributors to the MINING CHRONICLE embrace the most eminent scientific geologists, and thoroughly practical miners of America. The editorial department is universally acknowledged to be conducted with great ability, and is distinguished for the truth and impartiality of its discussions, and the fearlessness with which baseless schemes are exploded and unprincipled speculators exposed.
The MINING CHRONICLE is published once a week; each number contains eight large quarto pages.

TERMS TO SUBSCRIBERS IN ENGLAND.
One copy for one year..... \$4, or £3 16 8 sterling.
Two copies for one year..... \$7, or £1 9 2 sterling.
One copy for two years..... \$7, or £1 9 2 sterling.
Which covers postage to England; invariably in advance.
All orders, remittances, and communications, to be addressed, pre-paid, to M. B. MOSKOW and CO., 216, Pearl-street, New York.

TO INVENTORS AND MANUFACTURERS.
The "SCIENTIFIC AMERICAN" is the BEST and CHEAPEST WEEKLY PAPER for MECHANICS and INVENTORS. Each number is illustrated with from Five to Ten Original Engravings of New Mechanical Inventions; also, a List of American Patents; worth ten times the subscription price to every inventor. Terms, 11s. per annum.—Apply to AVERY, BELLFORD, GARDINER, and CO., patent agents and negotiators, No. 32, Essex-street, Strand, London. Corresponding offices in Paris, Brussels, and New York.

NOTICE TO RAILWAY AND STEAM-BOAT TRAVELLERS.
—ANDERTON'S HOTEL, 162, 164, and 165, FLEET STREET, BREAKFAST, with joint, is, 6d. BEDS, 10s. 6d. per week. DINNERS from Twelve to Eight o'clock; joint and vegetable, is. 6d.; with soup or fish, 2s. TURTLE SOUP and VENISON DAILY. TABLE D'HOTE at Half-past One and Half-past Five, at Two Shillings each. A night porter in attendance.

SISAL CIGARS! SISAL CIGARS! SISAL CIGARS!
—At GOODRICH'S CIGAR, TOBACCO, and SNUFF STORES (Established 1780), 416, OXFORD STREET, LONDON (nearly opposite Hanway-street), BOX containing FORTY-FOUR FINE SISAL CIGARS for ONE SHILLING and NINE-PENCE; post free, 27 stamps. None are genuine unless signed "H. N. GOODRICH."

GRIMSTON'S AROMATIC REGENERATOR is the only article that will PRODUCE a NEW GROWTH of HAIR of its natural colour; a few applications will cure every disease to which the human hair is subject, producing a luxuriant growth. Sold in bottles at 4s., 7s., 11s. (this contains four of the 4s. size); if through the post 12s., tin case; and Grimston's Three Minutes' Advice upon the Growth and Cultivation of the Human Hair, including his pamphlet, with 20 real testimonials to WILLIAM GRIMSTON, inventor of the celebrated Eye Snuff, Herbarby, Highgate. Depot, 52, High-street, Bloomsbury, London.

"Read ye that run the awful truth, | A worm is in the bud of youth,
With which I charge my page; | And at the root of age."—Corper.
DEBILITY, NERVOUSNESS, AND EXHAUSTION.
Just published, New Edition, price 1s.; free by post for 13 stamps.

THE SCIENCE OF LIFE: or, How to ensure Moral and Physical Happiness, with Rules for the Preservation of Health and Strength, and Precautionary Hints for the guidance of the Weak, the Nervous, the Seditious, and the Delicate. By a PHYSICIAN.
Also, by the same author, price 2s.; free by post for 26 stamps.
NERVOUS DEBILITY, its Causes, Symptoms, Varieties, and Cure. A complete Essay on Spermatocuria, and on a new, safe, and speedy mode of treatment, showing the serious consequences resulting from the dangerous remedies commonly employed in this disease.
This work, emanating from a qualified member of the medical profession, the result of many years' practical experience, is addressed to the numerous classes of persons who suffer from the various diseases acquired in early life. In its pages will be found the causes which lead to their occurrence, the symptoms which indicate their presence, and the means to be adopted for their removal.
Simpson and Co., 25, Paternoster-row; HANLEY, 63, Oxford-street; MAYN, 39, Cornhill; HOBBS, 19, Leicester-square, London; NEWTON, Church-street, Liverpool; WESTMACOTT, druggist, Market-street, Manchester; POWELL, Westminster-land-street, Dublin; and all booksellers.

THE GREAT EUROPEAN REMEDY FOR NERVOUSNESS, RELAXATION, AND EXHAUSTION.
Protected by Royal Letters Patent, and sanctioned by all the great Continental Colleges of Medicine.

DR. DE ROOS' CELEBRATED GUTTE VITÆ, OR LIFE DROPS, are the great European remedy for Spermatocuria, Exhaustion, Nervousness, Debility, Incapacity for Society, Sindy, or Business, Slaking of the Hands and Lungs, Indigestion, Flatulency, Shortness of Breath, Consumptive Habits, Dimness of Sight, Dizziness, Pains in the Head, Eruptions, Blisters, Pimples, Sore Throat, Faints in the Bones and Joints, Scoury, Scrofula, and all those diseases for which mercury, sarsaparilla, &c., are not only employed in vain, but too often to the utter destruction of the sufferer's health. Their almost marvellous powers must be felt to be believed. Hundreds of apparently hopeless cases, which had been given up by the faculty, have been speedily cured, and many thousands have derived almost miraculous relief, when everything else had signally failed.
Price 1s., and four times the quantity 33s. per bottle, obtainable through all medicine vendors; of whom also may be had the "Medical Adviser," 2s. 6d. in sealed envelope; or it may be sent direct from the Author for 42 penny stamps.

Advice and medicines sent to any address secure from observation, on receipt of a full detail of the case and the usual fee of £1. Post-office orders payable at the Holborn Office to Walter De Roos, M.D., 10, Berners-street, Oxford-street, London. Hours for personal consultation daily from 11 till 4, Sunday excepted.
N.B.—Should difficulty arise in procuring the above, enclose the amount per Post-office order or otherwise, to 10, Berners-street, and they will be sent securely packed per return.

HOLLOWAY'S OINTMENT AND PILLS EFFECT EXTRAORDINARY OF BAD LEGS.—Mr. John Stokill, of West Harley, Northampton, suffered for upwards of two years with several wounds of his legs; every means were tried in the hope of deriving some benefit, but without success, and the disease ultimately assumed so severe an aspect, that it was considered amputation would be necessary in order to save his life. Hopeless as his case appeared, he resolved not to undergo the operation, but commenced using Holloway's Ointment and Pills; the result was an almost immediate improvement, and by continuing these wonderful working remedies both legs were completely cured.—Sold by all vendors of medicine; and at Prof. Holloway's establishments, 214, Strand, London, and 50, Maiden-lane, New York.

THE MINING SHARE LIST.

Shares.	Mines.	Paid.	Last Price.	Present.	Dividends per Share.	Last Paid.
3120	Alfred Consoils (copper), Phyllick	£211s. 10d.	£13	15%	£13 10d.	£0 4-0-Aug., 1855.
6930	Altgoed Consoils Slate Quarry	25	1 1/2		0 3-0	0 1-6-July, 1855.
1824	Ballicadden (tin), St. Just	11 1/2	6		12 5-0	0 5-0-Jan., 1854.
4001	Bat Holes, Wrotham, Salop	17 17s. 6d.	12 1/2		0 10-0	0 10-0-April, 1855.
8001	Bedford United (copper), Tavistock	21 6s. 8d.	12 1/2		7 12-6	0 7-0-Aug., 1855.
8002	Black Craig (lead), Kirkcubrightshire	9 1/2	22 1/2		0 5-0	0 2-6-July, 1855.
200	Blackall (tin, copper), St. Just	9 1/2	22 1/2		344 5-0	7 0-0-Aug., 1855.
1000	Carn Brea (copper, tin), Illogan	15	75		231 10-0	2 0-0-June, 1855.
2045	Carnyorth (tin), St. Just	3	3	3 3/4	0 6-0	0 3-0-Sept., 1855.
10000	Castle Slate Quarry, Dolwyddelan	1	1 1/2		0 2-0	0 4-0-Feb., 1855.
256	Conford (copper), Gwennap, Cornwall	7	7		9 0-0	3 0-0-June, 1855.
256	Cornwall (copper, tin), Camborne	20	125	122 1/2	58 0-0	3 0-0-June, 1855.
128	Cwmystwith (lead), Cardiganshire	60	120		45 0-0	5 0-0-March, 1855.
1024	Devon Great Consoils (copper), Tavistock	1	400	410 420	400 0-0	9 0-0-Sept., 1855.
12900	Dharode (copper), Ireland	1	75		0 3-0	0 1-8-Nov., 1855.
179	Dolcoath (copper, tin), Camborne	257 1/2	75		873 0-0	3 0-0-Feb., 1854.
12900	Drake Walls (tin, copper), Calstock	17 3/4	75		0 6-0	0 1-6-April, 1853.
800	East Darran (lead), Cardiganshire	32	75		8 0-0	4 0-0-Nov., 1854.
128	East Pool (tin, copper), Pool, Illogan	24 1/2	165		243 0-0	2 10-0-Aug., 1855.
1024	East Wheel Margaret (tin, copper)	24 1/2	12		0 5-0	0 5-0-Feb., 1854.
1900	Eyan Mining Company, Derbyshire	3 1/2	25 1/2		5 3-4	0 10-0-May, 1855.
494	Fowey Consoils (copper), Tywardreath	40	300		309 13-0	1 10-0-Aug., 1855.
2140	Foxdale, Isle of Man	71 10s. 6d.	30		44 7-0	1 0-0-June, 1855.
820	Galtee (New Shares of 25s. each)	25	30		5 4-0	1 0-0-June, 1855.
4448	General Mining Co. for Ireland (cop., lead)	3	2 1/2		1 0-0	0 3-0-June, 1853.
3000	Goginan (lead), Cardiganshire, Wales	8	6		22 0-0	5 0-0-Sept., 1850.
1024	Gonamena (copper), St. Cleer	13 1/2	25		0 7-0	0 7-0-Dec., 1852.
30000	Great Crinins (copper), St. Austell	1	2 1/2	2 1/2	0 10-0	0 4-0-Oct., 1855.
12900	Great Polgoth (tin), St. Austell	4 1/2	2 1/2		0 2-0	0 2-0-June, 1855.
6000	Great South (tin), St. Austell	2 1/2	5	4 5	0 5-0	0 5-0-June, 1855.
26665	Great Wheel Vor (tin, copper), Helston	100	200		181 10-0	5 0-0-Nov., 1854.
119	Great Work (tin), Gernoe	100	200		2 12-0	0 7-0-April, 1854.
1024	Herodford (lead), near Liskeard	3 1/2	11		1 18-0	0 5-0-Sept., 1855.
6000	Hingston Down Consoils (copper), Calstock	3 1/2	11		3 5-0	0 5-0-Sept., 1852.
2000	Holyford (copper), near Tipperary	11	—		380 0-0	5 0-0-March, 1851.
76	Jamaica (lead), Mold, Flintshire	31 13s. 6d.	—		0 4-0	0 4-0-March, 1854.
3048	Kennedy (copper), Breage	6s. 7d.	1		2 0-0	0 2-0-June, 1855.
780	Kirkcubrightshire (lead), Kirkcubright	9 1/2	—		1300 0-0	50 0-0-Feb., 1855.
500	Lacey Mining Company, Isle of Man	100	1000		0 2-0	0 2-0-Aug., 1851.
6000	Lewis (tin, copper), St. Erth	34 8s.	120		1048 0-0	5 0-0-June, 1855.
1000	Levant (copper, tin), St. Just	18 1/2	200		223 15-0	5 0-0-June, 1855.
400	Lisourne (lead), Cardiganshire, Wales	18 1/2	200		2 10-0	0 1-0-Dec., 1854.
320	Maclean State and Slab Company	25	29		12 10-0	0 1-0-Dec., 1854.
1000	Maclean (New Shares)	25	29		0 5-0	0 3-0-Sept., 1855.
6000	Marke Vay (copper), Cardon	47 10s. 6d.	3 1/2		0 17-0	0 7-0-Dec., 1854.
1000	Meridol Hill (lead), Somerset	3 1/2	—		1 11-0	0 2-0-June, 1853.
5000	Merrilyn (lead), Flint	24 13s.	—		11 0-0	0 14-0-June, 1855.
30000	Mining Co. of Ireland (copper, lead, coal)	7	14 1/2	18 1/2	0 1-0	0 1-0-Nov., 1855.
6000	Nantes and Penrhyn	1 1/2	1 1/2		0 3-0	0 1-0-April, 1855.
7500	Nantlle Vale (slate), Llanfyllin	1	1 1/2		41 0-0	2 0-0-Jan., 1855.
470	Newtons Mining Company, Co. Down	50	—		24 10-0	4 0-0-Sept., 1853.
200	North Pool (copper, tin), Pool	32 1/2	132 1/2		24 10-0	4 0-0-Sept., 1853.
140	North Roseker (copper), Camborne	10	70	29 1/2	5 6-0	0 13-0-Aug., 1855.
6000	North Wheel Basset (copper, tin), Illogan	nif.	29		23 6-0	0 10-0-July, 1855.
6100	Par Consoils (copper), St. Blazey	1 1/2	12 1/2		3 10-0	0 10-0-June, 1855.
1100	Peak United (lead), North Derbyshire	2 1/2	8 1/2		1 15-0	0 10-0-June, 1851.
1000	Perran (copper, tin), Penzance	3 1/2	300		50 0-0	10 0-0-Nov., 1853.
2000	Phoenix (copper, tin), Llanfyllin	300	—		6 6-0	1 0-0-Sept., 1854.
1000	Poiborro (tin), St. Agnes (Preferential)	15	—		30 4-0	4 0-0-Aug., 1855.
550	Providence Mines (tin), Uny Lelant	20	45		15 0-0	7 0-0-July, 1855.
256	Rosewarne United (copper, tin), Gwennap	24	250	240	372 0-0	8 0-0-July, 1855.
256	Santa Clara (copper), St. Cleer	29	320	315	60 0-0	20 0-0-June, 1855.
128	South Crinins (copper), St. Austell	19	300		11 7-0	0 7-0-July, 1855.
9000	South Tamar (silver-lead), Beerris	17 6s. 6d.	7 1/2		69 0-0	4 0-0-May, 1853.
256	South Tolgus (copper), Redruth, Cornwall	16	90	70	320 10-0	17 0-0-Sept., 1855.
124	South Wheel Frances (copper), Illogan	37 1/2	625	1 1/2	8 8-0	0 2-0-Dec., 1853.
124	Spearhead Consoils (tin), St. Just, Cornwall	1 1/2	1 1/2	1 1/2	2 0-0	1 0-0-Sept., 1855.
280	Spearhead (copper), St. Just, Cornwall	1 1/2	1 1/2	1 1/2	8 17-0	0 7-0-April, 1852.
1024	St. Aubyn and Grays (cop., tin), Breage	34 17s. 6d.	2		88 0-0	8 0-0-Feb., 1854.
94	St. Ives Consoils (tin), St. Ives	80	100		11 10-0	3 0-0-Oct., 1850.
1000	Stray Park and Camborne Vein (copper)	10 1/2	12	10 1/2	4 11-0	0 3-0-Feb., 1853.
9000	Tanagar Consoils (silver-lead), Beeralton	4 1/2	2 1/2	2 1/2	6 18-0	0 10-0-Feb., 1854.
6000	Tinroff (copper, tin), near Pool, Illogan	9	3 1/2	3 1/2	1 15-0	0 5-0-July, 1855.
3048	Trehane (silver-lead), Menheniot	3 1/2	4		4 10-0	1 0-0-Feb., 1854.
572	Trevelyan Consoils (tin), St. Ives	11 1/2	24		467 15-0	5 0-0-June, 1855.
95	Tresavean (copper), Gwennap, Cornwall	32 1/2	130		403 13-0	2 10-0-April, 1851.
10000	Trevelyan (copper), Gwennap, Cornwall	10 1/2	—		0 13-0	0 1-0-Feb., 1855.
4096	Trevelyan (silver-lead), Menheniot, Cornwall	2	3	2 1/2	55 0-0	5 0-0-Dec., 1854.
100	Trumpet Consoils (tin), near Helston	95	—		53 5-0	3 0-0-July, 1855.
400	United Mines (copper), Gwennap	40	245	215	2 5-0	0 2-0-Jan., 1855.
1024	Wellington (copper, tin), Penryn	8 1/2	—		0 15-0	0 5-0-Jan., 1855.
10000	Welsh Fossil (silver-lead), Talybont, Card.	5	6		0 11-0	0 1-0-June, 1855.
2500	Widder (copper), Illogan	1 1/2	31 1/2	30 1/2	27 4-0	5 0-0-Aug., 1855.
256	West Caradon (copper), Liskeard	20	160		12 0-0	2 0-0-May, 1855.
256	West Damsel (copper), Gwennap	410 7	117 1/2		23 15-0	0 10-0-July, 1855.
1024	West Fowey (copper), St. Erth	7	28 1/2	450	35 0-0	5 0-0-Aug., 1855.
125	Wheel Arthur (copper), Calstock	7 1/2	13 1/2	14	6 0-0	0 10-0-Aug., 1855.
240	Wheel Basset (copper), Illogan	6 1/2	750	760 780	690 0-0	25 0-0-Aug., 1855.
256	Wheel Buller (copper), Redruth	5	650	640	71 0-0	20 0-0-Sept., 1855.
1024	Wheel Charlotte, Penryn	3 1/2	12	350	9 1-0	0 10-0-June, 1855.
5700	Wheel Clifford (copper), Gwennap	41 14s.	7 1/2		1 4-0	0 2-0-Dec., 1854.
128	Wheel Friendship (copper), Devon	115	—		2375 10-0	8 0-0-May, 1854.
6100	Wheel James (iron, copper), Roche	17 4s.	7 1/2	7 1/2	0 2-0	0 2-0-May, 1853.
612	Wheel Jane (silver-lead), Kea	3 1/2	40		4 10-0	1 0-0-Oct., 1855.
256	Wheel Kitty (tin), Uny Lelant	65 8 6	42 1/2	40	2 0-0	2 0-0-Sept., 1855.
430	Wheel Lovel (tin), Wendron	33	50		293 0-0	3 0-0-March, 1855.
112	Wheel Margaret (tin), Uny Lelant	79	100	38 40	29 15-0	1 0-0-Sept., 1855.
512	Wheel Mary Ann (lead), Menheniot	7 1/2	280		173 13-0	4 0-0-May, 1855.
80	Wheel Owen (tin), Cornwall	24 1/2	20		40 10-0	3 0-0-Sept., 1852.
198	Wheel Reeth (tin), Uny Lelant	107	200		254 10-0	8 0-0-April, 1854.
520	Wheel Trevelyan (silver-lead), Liskeard	8 1/2	25	22 22 1/2	47 0-0	1 0-0-Jan., 1855.
1024	Wheel Trevelyan (tin, copper), Gwennap	8 1/2	4 1/2	8 1/2	10 2-0	0 7-0-Jan., 1855.
430	Wheel Wrey (lead), St. Ives	17 9s.	8 1/2	8 1/2	24 13-0	12 0-0-July, 1854.
5000	Wicklow (copper), Wicklow	5	29		0 2-0	0 1-0-Aug., 1854.
10000	Wrygan (slate), Ffestiniog	—	—	—	0 2-0	0 1-0-Aug., 1854.

FOREIGN MINES.

Shares.	Mines.	Paid.	Last Price.	Present.	Dividends per Share.	Last Paid.
5000	Alten Mining Company (copper), Norway	£14 1/2	2 1/2		4 5-0	0 15-0-Nov., 1853.
72000	Baden, Grand Duchy of	26	2 1/2	2 1/2	0 1-0	0 10-0-Nov., 1852.
10000	Brazilian Imperial (gold), Brazil	26	150	2 1/2	155 0-0	5 0-0-March, 1855.
2464	Burra Burra (copper), South Australia	40	67	63 67	73 12-0	4 0-0-July, 1855.
12000	Cobre Copper Company (copper), Cuba	4	67	63 67	0 16-0	0 16-0-March, 1854.
100000	Columbia (lead), Australia	1	—	—	4 18-0	1 0-0-March, 1855.
10000	Copiapu Mining Company (copper), Chile	10	20	18 20	9 0-0	0 10-0-June, 1855.
20000	General Min. Assoc. (iron, coal), Nova Scotia	20	15	13 15	3 0-0	0 10-0-Sept., 1855.
10000	Linares (lead), Pozo Ancho, Spain	3	8 1/2	7 1/2	0 2-0	0 1-0-July, 1853.
10000	Lusitania (of Portugal)	1	3	3 1/2	0 2-0	0 1-0-July, 1853.
13515	Marquette and New Granada	1	1 1/2	1 1/2	1 0-0	0 1-0-June, 1855.
2000	Obernberg (lead), Nassau	20	16	15 16	1 0-0	0 1-0-June, 1855.
10000	Pointe-a-Pitre (lead), France	20	16	15 16	1 0-0	0 1-0-June, 1855.
7000	Royal Santiago (copper), Cuba	12 1/2	5	4 1/2	33 0-0	1 0-0-July, 1853.
101000	San Fernando (silver-lead), Linares	1	1 1/2	1 1/2	0 19-0	0 7-0-June, 1854.
11000	St. John del Rey (gold), Brazil	15	29	26 28	29 17-0	2 0-0-June, 1855.
43174	United Mexican (silver), Mexico	AV.	28 1/2	3 1/2	1 16-0	0 4-0-Aug., 1853.
70000	Waller (gold), Goodland, Co. Virginia	1	—	—	0 9-0	0 9-0-July, 1855.
20000	Mexican and South American Smelting Co.	9	6 1/2	6 1/2	6 7-0	0 7-0-June, 1855.
185676	North British Australasian	1	—	—	0 8-0	0 8-0-March, 1854.

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Price.	Present.	Dividends per Share.	Last Paid.
7000	Adelaide Land and Gold Comp.	2	2 1/2	1 1/2	—	—
35000	Almaden (silver-lead), Spain	2	2 1/2	1 1/2	—	—
50000	Chanceryville Freehold	1	—	—	—	—
54900	Cologne Mining Company	1	—	—	—	—
120000	Clatsop (lead), Rhinisch Pruss.	1	—	—	—	—
20000	Iberian (silver-lead), Spain	1	—	—	—	—
12000	Jamaica (lead), St. Just	1	—	—	—	—
20000	Keweenaw Point (cop., sil.)	5	—	—	—	—

MINES WHICH HAVE SOLD ORES.

Shares.	Mines.	Paid.	Last Price.	Present.					
1024	Aberdovey (lead), Merioneth	3 1/2	—	—	1000	Camborne Consols	3 1/2	12	—
3000	Altarnun Con. (tin, cop.), Altarn.	3 1/2	—	—	6000	Cannard Mawr (lead, copper)...	1	—	—
2000	Anarfoe Coal Company	7	7	—	1024	Cargold Consols, St. Cleer	6 1/2	8	—
940	Ballicadden (tin), Uny Lelant	3 1/2	—	—	2500	Cargold, Newlyn	25	15 1/2	15 1/2
4000	Ballicadden United	3 1/2	—	—	3000	Carwarth	2	—	—
12000	Ballygonnec (lead), Wicklow	1	—	—	5000	Caroline Wheel Prosper	2	5	—
4000	Ballyvaughan (lead), Wicklow	1	—	—	8000	Carreg-hova (cop, lead), Salop.	1	—	—
5000	Barytes Co., Co. Clare	£1 12	—	—	1024	Carvannall	—	5 1/2	4 1/2
4000	Barytes Company of Ireland	1	—	—	6400	Carvath United	2 1/2	3	—
3000	Basset Granite United (cop.), Kea	3 1/2	—	—	—	Castle Dinorwic	—	—	—
4000	Bedford Consols	3 1/2	2 1/2	2 1/2	6000	Caylan, North Wales	2 3	2 1/2	—
500	Hell and Llanarth, Gwennap	11	1 1/2	2 1/2	200	Cehn Brywyo (lead), Cardigansh.	33	8 1/2	—
1300	Bolling Well (copper)	10	17	—	2000	Clara (lead), Cardiganshire	£1 5 6	1 1/2	—
4900	Borlough Consols, Plympton	4 1/2	—	—	1024	Clijah & Wentworth (tin, cop.)	15	17 1/2	—
4335	Bottle Hill (copper), Plympton	4 1/2	—	—	8000	Clloawne Wood	—	—	—
120	Britannia, Llanarmon	17 19 6	15	—	2000	Coed Mawr (lead), Llanidloes	6 1/2	2 1/2	—
4000	Brynford Hall (lead), Flint	20	60	—	1000	Collocombs	12	60	40 42
1000	Bryntal, Llanidloes, Montgom.	7	—	—	15000	Conemara, Galway	4	—	—
420	Rudnick Consols (tin), Penryn	2 1/2	—	—	2110	Cook's Kitchen, Illoren	£15 19 3	3	—
6000	Bryndall, Llanidloes, Montgom.	7	—	—	30000	Cooshen (copper), Cork	1	—	—
4000	Bryndall, Llanidloes, Montgom.	7	—	—	1000	Craddock (cop, lead), Llanidloes	1	20	25
2000	Bwch (sil.-lead), Cardigansh.	1 1/2	6	—	600	Craig-y-Wynn (lead), Llanidloes	8 1/2	—	—
6000	Cae-grian (gold), Merioneth	4	—	—	12800	Cross-hill and Tees Head	—	1	—
5000	Cae-gynon, Cardiganshire	10s. 6d.	—	—	6400	Crow Hill, St. Stephen's	1 1/2	—	—
1024	Caerphilly & Carllann, S. Wales	3	—	—	9000	Cubert (silver-lead), Cornwall	2 1/2	—	—
4000	Callington (id., cop.), Callington	8	1 1/2	—	10000	Cwm Darren (lead), Cardigansh.	—	—	—
2884	Castell Consoils (tin and cop.)	£4 1/2	—	—	6700	Cwmllynfell & Green L., Card.	3 1/2	—	—
2745	Calestock United (tin and cop.)	£4 1/2	—	—	1000	Cwm Erian (lead), Cardigansh.	—	1	—
					3000	Dalriach (cop, lead), Brecon	23 s. 6	7 1/2	—